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NEH White Paper for Grant # **PW-51397-13**

Project Title: **Planning for *The Greatest Digitization Project on Earth* with the P. T. Barnum Collections of The Barnum Museum and the Bridgeport Public Library**

Project Director: Adrienne Saint-Pierre

Grantee Institution: The Barnum Museum

Date Submitted: September 30, 2014

f. Project Activities

Overview: In 2013, The Barnum Museum and the Bridgeport History Center (at the Bridgeport Public Library) embarked upon a year-long project to plan for a future digitization project, a direction suggested by ten humanities scholars who had convened at a Roundtable discussion at The Barnum Museum in May 2012. They recommended that the Museum begin to create collections-based digital content to use in multiple applications. The idea for the collaboration between the Museum and the History Center (BHC) grew from a shared desire to meet the expectations of today's researchers for access to digital resources, and to respond more effectively to the many queries pertaining to our P. T. Barnum collections. Staff members are fully aware that the current onsite-only access to these rare and largely unique primary resources limits their potential to contribute to cultural heritage projects, fields of study, and educational tools. Moreover, there is little potential for reaching new audiences. Recognizing this led to our considering digitization of the Barnum material and making it accessible via the Internet. The focus of the resulting NEH HCRR Foundations planning project has been the archival and artifact collections pertaining to P. T. Barnum and his famous associates such as Jenny Lind, Tom Thumb, Jumbo, and others, collections that both institutions have held for many decades and which continue to expand through donations and purchases.

The activities were geared toward building the “foundation blocks” for a future implementation project. The planning process revealed a wide array of issues that had to be considered and decisions made. We had to learn about current digitization and preservation best practices, develop selection criteria, decide whether work should be done in-house or by vendors, predict how various audiences could benefit from the material, think about how it should be presented and made readily discoverable, and ensure long-term preservation of the digital assets. Our grant project was thus multi-layered in order to acquire the background and information needed.

The main activities involved team building, educating ourselves, conducting site visits and consultations with experts, seeking technical advice, creating planning tools, exploring opportunities, and experimenting. The products of these activities are documented in our meeting notes, the consultants' reports and assessments of artifacts and documents, technical advice provided by experts, an information resource “bank,” newly created tools to facilitate item selection and cost estimation, and our testing of processes and protocols.

Team Building: The project began by forming a team from the staff of the Museum and BHC to articulate goals, objectives and parameters for this initiative. Jennifer Vinopal (Librarian for Digital Project Initiatives, Bobst Library, New York University) was hired as the Digital Projects Consultant to guide the sequence of activities and phases of planning, and to facilitate two focus group meetings with a larger team that included humanities scholars Dr. Katherine C. Grier (University of Delaware) and Dr. Neil Harris (University of Chicago). These facilitated group meetings took place in the early and late stages of the project.

Ms. Vinopal's many years of experience managing digital projects of all sizes and types was invaluable. Her approach was geared more toward developing our understanding of successful project management—including its “human challenges”—as well as best practices and careful decision-making, with somewhat less emphasis on infrastructure issues (although these were certainly not ignored). Her awareness of the risks associated with collaborative efforts, and her clarity in articulating practical paths forward were exactly what we needed. She mentored us, led us to excellent resources and information, while also seeking additional recommendations and perspectives from other colleagues. During the course of the project, the Museum and BHC staff met regularly to discuss progress and share information about opportunities, keep apace with the work schedule, and assign tasks, and schedule next steps. The Project Coordinator led team meetings and Ms. Vinopal answered follow-up questions via email and phone. Agendas and meeting notes were uploaded to Google Drive.

Education: During the first phase of the project we created a resource “bank” of mainly technical information. Pdf documents and hyperlinks were organized by topic and added to our Google Drive; some were designated as “must-reads.” Two staff members also attended workshops, including a two-day “Digital Collections 101” program funded in part through the Library Services and Technology Act of IMLS. It was presented by the Connecticut League of History Organizations (CLHO) and the Connecticut State Library, and provided an overview of the wide-ranging issues and considerations involved in executing a digitization project, as well as discussing the management and preservation of digital assets. From these workshops we learned about the methods, successes, and challenges of projects undertaken by the State Library, the Hartford History Center (at the Hartford Public Library), and the Connecticut Historical Society. Museum staff also attended relevant sessions at the 2013 New England Museum Association conference, such as one on cloud-based collections data management systems, and another about a collaborative online collections project that brings together the cultural resources of several Newport, Rhode Island, museums and libraries.

Collections Content: One of our first objectives was to become much more familiar with the documents, photographs, ephemera, and artifacts in the P. T. Barnum collections of the Museum and BHC, and to have these materials reviewed by humanities scholars with relevant subject expertise. Since the staff had only general knowledge of each other’s collections, an essential first step was to conduct in-depth “tours.” In that process, items that were to be reviewed by the consultants were identified and located, lists were prepared, and accession records tabbed for efficient access during the site visits.

Manuscript and Artifact Assessments: The two scholars traveled to Bridgeport to conduct assessments of the Barnum-related materials in the two collections, culminating in reports that are included in the Appendix. The purpose of this activity was to: a) determine if the humanities content and utility merited the time and expenditure of funds to digitize; b) guide prioritization, assuming that it would not be possible to digitize all material; c) discover connections among items which might be helpful to potential users as well as ourselves; d) consider the “fit” of these diverse materials with different audiences; and e) contextualize the material in terms of 19th century American history, the history of popular culture, and other topics, and consider how this might best be presented via the Internet.

The review of the P. T. Barnum collections was conducted in several sessions to avoid oversaturation and fatigue. The assessments formed a major part of the project’s “first phase,” although the conversations about the collections continued throughout the course of the project. The items to be assessed were divided into manuscripts, and artifacts and ephemera, the former to be reviewed by Dr. Harris, and the latter two groups by Dr. Grier. The distinction was made because of the scholars’ areas of expertise and because the methods by which the documents and artifact material were assessed differed in some key respects.

Dr. Harris, Professor Emeritus at the University of Chicago, examined all manuscript items, including diaries, a journal, large ledger books, loose and bound correspondence (personal and business), contracts and agreements, bills and receipts, rare issues of Barnum’s early newspapers, and more. Having researched P. T. Barnum extensively for the biography, *Humbug: The Art of P. T. Barnum* (1974), Dr. Harris is familiar with Barnum manuscript material at other institutions and thus knew what resources we have which are unlike others. He made detailed notes on the content and humanities relevance of the material he examined, and suggested priority rankings, all of which was included in his report.

Dr. Grier, Professor and Director of Museum Studies Program at the University of Delaware, worked with Museum staff to assess the artifacts and ephemera. The artifacts were reviewed using rubric worksheets (see Appendix) that ranked various attributes, and content and utility for humanities research. These focused on provenance, historical association, distinctiveness, audience interest, cross-disciplinary

potential, and image capture readiness (condition). Points were assigned in each area, so that the objects could be “scored.” The rubric was used to ensure consistency in the review process, since nearly 250 objects were closely examined, and the reviews were accomplished in several sessions. (Many more items were seen but did not get worksheets, either because they were too similar to others or judged not to be a medium or high priority item.) The data from the worksheets was compiled in a spreadsheet which allowed for sorting by object “score,” object type, and thematic category. Additional notations, such as relationships between artifacts, were added to the spreadsheet. Dr. Grier used this document, in part, to prepare her report.

Theme and Topic Discussions: In conjunction with Dr. Grier’s ongoing consultations, the team developed a matrix of key themes and time periods in Barnum’s life to consider what we could effectively represent through digitized collections. As expected, certain topics and time periods have ample material, but others less so. This is partly due to the nature of the topics—for example, “commercialized leisure” is supported by a range of ephemera and related business correspondence, “family life” is readily represented through household furnishings, paintings, and personal possessions, but “civic life and philanthropy” offers far less material. The collections are rich in material associated with Barnum’s career as proprietor of the American Museum and its famous attractions, most of whom/which pre-date Barnum’s more widely known circus years. We debated about the challenge of representing Barnum’s lesser-known career paths and interests, such as the Temperance movement, his anti-slavery views, his years as a State Legislator and as Mayor, and as a newspaper founder and editor and concluded these should form part of our digital content despite the small number of items.

Online Collections Reviews: Also with Dr. Grier, we conducted a review of existing online collections that have material pertaining to P. T. Barnum. We discovered that most pertain to the circus (e.g., collections of circus posters) and that there is very little in the way of artifacts and manuscript material. Overall, little information is provided to users. (Dr. Grier discusses this in her report.) A researcher or general information-seeker is not likely to find anything online that actually belonged to Barnum. Similarly, very little unique material is available pertaining to Charles Stratton (Tom Thumb). These are gaps that both the Museum and BHC collections could readily fill. Despite the relative dearth of Barnum material online, the team found that the Victoria & Albert Museum’s online collection, which contains a few Tom Thumb and Jenny Lind items, offers excellent contextual information and object descriptions, and that we could consider this a model for metadata.

Technical Consultations: Technical consultations occurred in the second half of the project. An on-site visit was arranged with Digital Products Librarian Michael Bennett (Homer Babbidge Library, University of Connecticut), a digital capture specialist. He spent a half day reviewing the manuscript, two-dimensional ephemera, and bound items that we had identified as potentially difficult to scan, while the staff took detailed notes. Mr. Bennett’s comments greatly increased our knowledge of archival scanning processes and prompted us to consider undertaking digitization in phases.

Paul Mutino, a professional photographer whose clients include several large museums, made a site visit to the Museum. Artifacts reflecting the gamut of object types were laid out so that he could see the extreme variations in scale, reflectivity, shape/volume and mounting needs. From this visit and our discussions about image standards and master files, Mr. Mutino prepared a report summarizing the methods and practices he would employ, and provided a framework by which we could estimate the cost of digital photography. Unlike typical object categories, these were based on the differing photographic requirements of objects, including time estimates. Having this information enables us to plan an efficient workflow.

Developing a file-naming scheme to manage metadata and image files was another activity. The format had to accommodate a variety of accession numbering systems since object numbers needed to be in the

file names, along with view number, year of image capture, etc., and it needed to use the same number of digits so that the file names aligned when sorted. With Ms. Vinopal's input, the Project Coordinator developed a file-naming scheme for the Museum which can be adapted by BHC; it is included in the Appendix. The Museum took advantage of an opportunity to test photography workflow and the file-naming scheme when a film production company requested professional images of several artifacts.

Scanning: BHC staff consulted at length with Imaging Services staff at NEDCC and with Michael Lee, Director of Paper and Photographic Conservation at NEDCC, to get information about the scanning methods and costs. BHC staff subsequently created a matrix by which to estimate the cost of scanning most of our paper-based items (see Appendix). Using that tool, staff painstakingly went through the documents selected for digitization to determine scanning costs. Costs are not only dependent on document size, but also format and difficulty of handling. The latter is often directly related to condition, and it was evident from our review work that we should also seek conservation estimates.

Conservation: Conservation consultations were not part of the original work plan, but we realized that addressing conservation issues early on would be important to the success of a digitization project. Consultation with NEDCC began remotely, but ultimately a BHC staff member traveled to Massachusetts with selected paper-based items from the collections so they could be seen both by conservators and Imaging Services staff. Treatment proposals were prepared for thirteen items, including handbills, a ledger, photographs, pamphlets and couriers. Among artifacts, eight items needing conservation were chosen for treatment proposals, and these were seen by the appropriate conservators.

Preservation and Dissemination: A goal of the project was to determine how the digital content would be made accessible—whether the Museum and BHC would create a web site devoted to Barnum digital collections, or explore other ways of making the material accessible via the Internet. Parallel to that discussion was the question of how the digital assets could be preserved and sustained over the long-term. In the first few months of planning it became clear that creating and maintaining a web site, and sustaining the digital objects over time would present a major challenge to our small institutions, lacking ongoing technical support, staff time, and funding. In addition, the material would not be as readily discoverable if it only resided on our own web site. We decided to “pick up” on conversations about a planned statewide digital repository that we had begun when we were writing the planning grant. Our goal was to catch up on the Connecticut Digital Archive (CTDA)'s current state of development, as well as future plans for Connecticut History Online (CHO), an existing curated platform whose infrastructure is supported by the University of Connecticut. CTDA is located at the University of Connecticut's flagship campus in Storrs and is funded through a partnership between the University of Connecticut Libraries and the Connecticut State Library. Among the three communities CTDA will serve, Connecticut-based museums, libraries and archives will be able to form collaborative agreements for data curation and access services, including a connection to the Digital Public Library of America (DPLA).

During the second half of our project, the team communicated with staff from CTDA and CHO via email, and video and conference calls. We also organized a meeting at the Museum with Gregory Colati, the University of Connecticut's Director of University Archives and Special Collections at the Dodd Research Center, who along with other staff is developing CTDA as a statewide digital repository; Michael Howser, Director of the Connecticut State Data Center; and Kathleen Foulke, Project Director of CHO. We also invited the librarian-archivist from the nearby Fairfield Museum and History Center to participate since she had expressed interest in CTDA and CHO.

As a result, the Museum and BHC (and the Fairfield Museum) were given the opportunity to try out the process of creating metadata files for existing high quality digital images, then uploading the metadata and corresponding image files--essentially the ingest process--with CTDA. CHO was instrumental in helping with this since they already had standards in place for subject headings and nomenclature for

historical items. CTDA and CHO worked together on the metadata structure and protocols and then provided instructions for us to use. BHC tested with a number of professional quality images that were a product of a previous conservation project; the Museum tested a few object images that had been made for an exhibition catalog. Staff communicated with Mr. Colati and Mr. Howser after the initial tests to work out glitches and clarify the steps for uploading, and discuss alternate methods that could be used (batching) for the ingest. This helped with CTDA's "Resources for Participants" page on their web site which includes a Metadata Guide, and Guides for Creating and Ingesting Repository Objects (ctdigitalarchive.gov/resources-for-participants). BHC staff compiled notes from the emails and phone conversations.

g. Accomplishments

Two facilitated team meetings, one in the first phase, and one near the end of the project, were key to ensuring communication and clarity. Despite the challenges of scheduling meetings in which some participants come from far afield, they are essential to getting everyone on the same page. Face-to-face meetings were an opportunity to discuss areas of both agreement and uncertainty (the latter is less apt to be communicated by phone or email), uncover knowledge gaps and figure out how to address them, and develop a consensus on the next stages of planning and implementation. This was especially important with a collaborative project involving a museum and library since the approaches, strategies, and even the "language" that we use can be quite different. The meetings were also used to establish methodology for the activities, including ways of sharing the information gathered and keeping it organized. (We did deviate from the original communication plan to use Podio as an online work platform, instead using Google Drive to share, comment on, and edit documents.) Digital Projects Consultant Jennifer Vinopal was extremely adept in structuring and leading these meetings, and provided excellent follow-up notes in addition to producing interim and final reports (see Appendix). We highly recommend that anyone considering a digitization project read Ms. Vinopal's reports.

BHC and Museum staff worked directly with humanities scholars whose subject expertise is in the history of American popular entertainment, 19th century material culture, and the life and legacy of P. T. Barnum and others he made famous. The scholars, Dr. Harris and Dr. Grier, spent a total of twenty-seven days in their consultations, which included onsite assessments, participation in focus group meetings, discussion of themes and online collections with staff, email and phone communication time, and report preparation and editing. Dr. Harris reviewed all manuscript items, including diaries, a journal, large ledger books, loose and bound correspondence (personal and business), contracts and agreements, bills and receipts, rare issues of Barnum's early newspapers, and more. He produced a report summarizing his findings, recommending priorities, and providing content details of the manuscript material.

As a noted Barnum scholar and biographer, Dr. Harris's insights were very important to us, and in his report he eloquently summarized the continuing fascination with this American icon: "For historians, humanists, and cultural critics alike, Barnum remains simultaneously familiar and elusive, easily summed up in well recognized truisms and quotations, but, on closer examination, resisting stock expectations. Biographers of the man and of his principal attractions continue to stake claims to new arguments because Barnum is a moving target, protean and difficult to pigeon hole." Further, he noted, "[Barnum] has long embodied many of the contradictions that lie at the heart of our national identity." This quality presents a very convincing argument for making the P. T. Barnum collections accessible through digitization.

Dr. Grier worked with Museum staff to assess the artifacts and ephemera. This was achieved by first completing a rubric worksheet for each item (237 total), after which data from the worksheets was entered into a spreadsheet. The spreadsheet allowed for sorting by type of item, by the "score" assigned (based on subtotals in the rubric), and by four major thematic groupings; additional notations, such as recording relationships discovered between artifacts, were added to the spreadsheet. Dr. Grier used this information, in part, to prepare her report (see Appendix).

Dr. Grier also led discussions on thematic groupings that we might consider in a digital presentation, and helped us review existing online collections pertaining to Barnum and his attractions—eliciting our thoughts about what was well done, and what was not. All agreed that web sites providing contextual information as well as object descriptions written in familiar language make a huge difference in content utility (and, no doubt, interest level) for most audiences. In respect to digital Barnum materials, there were few sites we considered to be very good, and this exercise showed us that well-written descriptive and contextual information is key to constructing meaning. As Dr. Grier pointed out in her report, “Museum digitization projects are primarily useful to scholars, but the intellectual framework that guides almost all collection cataloging (maker, type, medium, gift/purchase . . .) does not help community audiences make sense of what they find online. . . . Although they may be accomplished users and interpreters of the objects in their own lives, people remain unfamiliar with the concepts behind material culture studies, that artifacts are primary resources that reveal ideas and information about people and the cultural and social frameworks in which they live.”

Having been the leader of a Scholars’ Roundtable convened in 2012 at The Barnum Museum, Dr. Grier was readily able to draw upon the humanities themes articulated in that two-day meeting. The review enabled her to see where the collections strengths lie in relation to those themes. She noted, “. . . the artifact and visual collections are particularly strong in relation to . . . commercialized leisure; popular interest in learning and culture; entrepreneurship, opportunity, and innovation; and class, self-presentation and opportunity.” Dr. Grier also discussed a potential interpretive framework that would tie in to these strengths, idea “constellations,” as she called them, with their “stars” being the various artifacts. The constellations included celebrity and fame; enterprise and innovation; and Barnum’s life in Bridgeport, including his civic life and private/family life. In the conclusion of her report, Dr. Grier supports making the collections more publicly accessible, stating that, “They contain primary source material in many forms that can be attractive to educators, from K-12 through college students, Barnum enthusiasts, scholars from several disciplines, and others. . . . Collaborating with the CTDA, and being willing to experiment with methods of public engagement with digital resources, may make the Barnum/BHC digitization project a national model for presenting online history collections.”

In summary, our project accomplished what we set out to do, with our main goals and objectives achieved, and additional related activities undertaken. We formed an intellectual “bridge” between the Museum and History Center by learning about the material in our collections. In forming a project team, we enhanced the relationship between the library and museum, and fostered sharing of knowledge and freedom to discuss differences in our approaches. Our Digital Projects Consultant was instrumental in getting us on the right paths, leading us to information and resources, and moving us to next steps. She was an excellent listener, which was as important as her knowledge. The reports produced by the scholars captured collections content information and provided new insights and perspectives on the Barnum material. We identified selection priorities. We discovered connections among artifacts and between artifacts and documents that were previously unrealized, which could lead to new narratives. With the technical advice sought from NEDCC, a professional photographer, and a digital capture specialist, we created tools that facilitate cost estimating and planning the workflow. Of particular value has been the opportunity to work with CTDA and CHO to test the ingest process, and the timing of our project was fortuitous since it has aligned with CTDA’s development. This allowed us to participate “on the ground floor” in the state-level initiative to create access to cultural heritage resources. (The Museum and BHC are currently among ten participant institutions with CTDA but there will eventually be dozens more.)

h. Audiences

Since this was a planning project, it was not designed to reach external user audiences (although the implementation of a future digitization project would.) In the process of carrying out the project

activities, we did establish relationships that will lead to new audiences; we also strengthened the relationship between the collections staff of the Museum and the BHC. The two staffs had never worked together on a project despite the mutual interest in P. T. Barnum materials and serving many of the same researchers. Now, having specific knowledge of each other's holdings, and documentation of the collections that will carry forward, both institutions are in a better position to support each other's efforts in collections management, conservation, and service to patrons. In that regard, our current audience of researchers and library patrons will be better served by the increased knowledge of each other's holdings.

Even our preliminary work with CTDA and CHO has created awareness among other institutions in the state about the content of our collections and their relevance to the humanities. This exposure will undoubtedly build as we continue our work with CTDA and CHO, especially since our project coincides with others underway to provide greater access to Connecticut's cultural heritage resources and expand its audiences. During the course of the project we were contacted by curators at other institutions who learned of our project from the NEH web site. Curators from the Wadsworth Atheneum in nearby Hartford, and the John and Mabel Ringling Museum of Art in Sarasota, Florida, called us to discuss the framework of our planning activities as they embarked on planning projects of their own.

i. Evaluation

The project was not formally evaluated outside of the project team, however the people we have been working with at CTDA and CHO have several times expressed their appreciation of our planning efforts; they know that many digitization projects are undertaken without adequate planning. Kathleen Foulke, Project Director of CHO, expressed in an email message, "I have been so impressed at the process you & the BHC have followed with the planning grant and all the thorough and thoughtful investigation you have done regarding needs and options for going to the next level in making your resources accessible. Your points about metadata that supports discovery and provides the end user with a coherent and meaningful results set are such important ones. The tension between getting as many resources out there as expeditiously as possible and also ensuring that they are usable and useful has been the subject of so many conversations within the CHO contributing orgs--the eternal challenge given the diversity of practice among institutions and the scarcity/cost of human resources to create & sustain good records!"

A major strength of the project was assembling a group of consultants who were genuinely committed to the project, and who were liked and respected by all project staff. In particular having a Digital Projects Consultant who served as a mentor to the staff proved critical. Our project did not result in any major disagreements among the project staff, but it was easy to see the risk of a collaborative initiative dissolving had there not been someone from outside the institution to guide the planning. It is all too easy for staff members' regular duties to encroach on time that has to be devoted to the project, and an external "eye" on the project can help to counteract that. Had Ms. Vinopal's schedule allowed, we would have benefitted from additional onsite time with her attending some of our team meetings.

In evaluating the work with scholars we observed that knowledge of trends in digital collections presentations and how they might be used by a variety of audiences was at least as important as specific subject expertise. An advantage in our choice of scholars was that they already had some familiarity with both our collections, as they had been participants in the Scholars' Roundtable. Having established a good working relationship previously was a factor in making the intensive review sessions go smoothly.

j. Continuation of the Project

The planning project was successful in achieving the goals and objectives, and the results of the scholars' assessments assured us that the P. T. Barnum collections are indeed worthy of digitizing and making broadly accessible. Further, our conversations and tests with CTDA and CHO are leading us to the solutions we need to ensure sustainable outcomes after the digitization work is done. The results of our planning activities have steered us to pursue implementation, and it is our intention to submit a proposal

to NEH's HCRR program for the implementation project in 2015. Unfortunately for us, the July 2014 grant deadline was too close upon the conclusion of the planning grant, which ended June 30th; the knowledge and experience gained through the "next steps" and continuing activities would strengthen the next grant proposal.

In her final report Ms. Vinopal listed eleven activities that the Museum and BHC should do in the interim before the implementation phase (see page six of her report). As our original proposal stated, BHC will utilize Dr. Harris's report and other data gathered during the planning process to develop an electronic finding aid, and EAD record (Encoded Archival Description), and will make these available online. The team will also develop a project charter, which was highly recommended to prevent "mission creep" and misunderstandings that can arise along the way, especially with a project that takes more than a year to complete. The charter will articulate expectations, responsibilities, and goals, defining parameters by stating both what the project is, and what it is not.

The artifact assessment spreadsheet will continue to be refined since it can be used in a variety of ways. By end of winter 2015, the team will have identified all items to be digitized. Even though we had made good estimates for the scanning and photography costs, a final selection will allow us to be more precise with our funding request. In addition, the time and cost for mounting the artifacts to be photographed can be calculated. The Museum and BHC may also decide to explore funding options for conservation treatments of at least some items in the next year, although conservation costs will likely have to be included in the grant funding request.

Our initial efforts to test metadata creation and file uploading to CTDA will advance to the level of a pilot project as we become more proficient over the next several months. The development of a crosswalk for the migration of Past Perfect metadata to CTDA will increase the efficiency of the process.

Both the Museum and BHC have Past Perfect software for their collections databases. However, the Museum has decided to adopt Collective Access, open-source software designed for the management and presentation of museum and archival collections. The Museum is making this change because of Collective Access's advantages, including the flexibility of the software, its integrated subject headings, vocabulary, and Geonames, and pre-configuration with Dublin Core and other library standards. Other attractive features are the mapping tools that allow one to geo-reference artifacts, which would offer a new way of presenting Barnum-related artifacts--for example, presentation gifts made to Tom Thumb while on his first tour of Europe. Collective Access can also generate useful visualizations of collections data, such as scatter diagrams and timelines about the content of collections. By the end of this year, the Museum will adopt this software and begin upgrading existing (and creating new) catalog records of the Barnum material, a major step forward in preparing to digitize. The BHC also plans to achieve as much cataloging of their Barnum material as time allows, adding records to their Past Perfect database.

The decision to use Collective Access dovetails with a pilot project being proposed by the Connecticut League of History Organization (CLHO) for IMLS funding. CLHO wants to develop a Connecticut equivalent to NovaMuse, which is a portal to Nova Scotia museums' online collections developed by the Association of Nova Scotia Museums; all fifty-three museums in the consortium use Collective Access. Staff from Whirl-i-Gig, Collective Access's development team, is currently working with CTDA to explore how selected fields of data and image files from users' databases could translate for ingestion into CTDA, and the Connecticut-related items harvested by CHO. There will be 10 to 15 pilot adopters, all representing museums and history organizations. Although this is only at the proposal stage, the Museum's participation in an advisory group constitutes an ongoing part of digitization planning as the two projects are, from our point of view, closely related.

Dr. Grier recommended that the team return to themes and topics to discuss how they would be present in the metadata. Key words will need to be identified and used consistently by both institutions so that related items turn up in search results. Dr. Grier also suggested we address problematic Library of Congress subject headings (e.g., “freak show”), and terminology choices such as “little people” rather than “midgets.”

The team agreed that creating useful contextual information for artifacts should be one of our goals. To that end, Dr. Grier recommended that we “articulate a strategy for helping audiences become better interpreters of historical material and visual culture collections, by guiding them toward creating narratives as a product of their searches.” She also suggested evaluating item-level cataloging with potential users in different age groups and cohorts to see how they respond before we go about developing a standard for our object descriptions. The idea would be to convene focus groups of potential users (such as class from a magnet school, or college students) and experiment with descriptive and contextual information to learn how they would want information presented. Feedback from this kind of activity could inform our approach to creating digital content.

k. Long-Term Impact

Once the plan is implemented, this project will have a major long-term impact for the two institutions and their current and potential audiences, as well as on the resource material itself. While this digitization initiative is primarily intended to create access to these primary materials, it will also result in long-term preservation benefits, as the digital surrogates will reduce the frequency of handling original documents and artifacts, and for particularly delicate items, virtually eliminate the need for handling. Obviously, the less often items are handled and moved, the better their condition will remain. At present, some items in the collection simply cannot be used by researchers due to their inherently fragile condition, and this includes extraordinary unpublished material that could be tapped for a new Barnum biography.

Placing the master files in the CTDA repository will have a significant benefit to the institutions’ budgets in regard to technology expenditures and use of staff time. A lot of the financial burden for maintaining and preserving these digital resources will be alleviated. This impact is not only relevant to the foreseeable future, but also to years ahead, when it is reasonable to expect that digital objects will need to be re-formatted; CTDA will be responsible for performing that work. CTDA is currently defined as a preservation-oriented digital repository and by 2017 intends to be certified as a Digital Preservation Repository.

Also relevant to budgetary impact is the potential for a front-end interface developed by CTDA, obviating the need for the Museum and/or BHC to create and maintain a joint “Barnum collections” website. This service will have some cost associated with it, but the CTDA plans to make it very affordable. The placement of the digital objects in the CTDA repository, coupled with data curation and presentation services, will also result in far greater discoverability than if we placed digital content on our own websites. We will certainly expect to see an increase in the number of users from our current audiences (mainly researchers, historians, graduate students, authors, and documentary film makers), but also hope that broader access will attract a variety of audiences. New audiences for us could include, for example, schoolteachers and their students, undergraduates, scholars from other disciplines, and other kinds of professionals, such as artists and business people who might come across our material through key word and subject searches that are not necessarily “Barnum based.” For users, the newly available primary resources will present unlimited opportunities to mine content relevant to many disciplines.

Further, CTDA has signed an agreement with the Digital Public Library of America (DPLA) who will harvest metadata from CTDA. From our institutions’ perspectives, the opportunity to have our resources known through this aggregator is valuable because we will become more widely recognized for the

quality of our collections, and the breadth and depth of the P. T. Barnum holdings. Speculatively, we may be able to leverage the expansion of audiences served to attract sources of non-federal support.

1. Grant Products

The products of the grant project were created for our own use in developing the implementation plan. They include the following:

- *from the humanities scholars*: artifact assessment report* and manuscript assessment report
- *from museum staff*: a rubric worksheet* and a spreadsheet compiling artifact data
- *from library staff*: a matrix to numerically evaluate manuscript material and guide the selection of items to digitize, and a matrix to identify key themes and time periods represented by the material
- *from the digital projects consultant*: interim and final reports* to guide and inform the planning process, provide links to the best informational resources, and summarize steps for the implementation phase
- *from the museum photographer consultant*: a framework for estimating digital photography costs
- *from all staff*: detailed meeting notes generated from site visit with a digital capture specialist who provided advice on complex archival items;
- *from museum staff*: document that rationalizes and details the application of the file-naming scheme*
- *from library staff*: a matrix for estimating costs for scanning various types and sizes of rare and fragile manuscripts, ephemera, and bound material based on pricing provided by scanning vendor
- *from the conservation lab's digital capture department*: cost estimates for specific items brought for review
- *from two conservation labs and an individual conservator*: treatment proposals and estimates for selected key items
- *from the university developing the preservation repository*: for our pilot project, guidelines to generate metadata files for image files, and the instructions for uploading all files to the repository

The products marked with an asterisk (*) are included in the White Paper Appendix.

Contents of White Paper Appendix:

1. Jennifer Vinopal, Digital Projects Consultant:
 - i. Interim Report with August Kick-off Meeting Notes, September 2013
 - ii. Final Report, June 2014
2. Dr. Katherine C. Grier, Humanities Scholar Advisor:
 - i. Artifact Assessment Report, June 2014
3. Barnum Museum Staff
 - i. Rubric Worksheet
 - ii. File Naming Scheme

4. Bridgeport History Center Staff
 - i. Digitization (Scanning) Costs Information

Barnum Project: Interim Report of the Digital Project Consultant

Issued by Jennifer Vinopal, 9/2013

Introduction

In August, 2013, I visited the Barnum Museum twice to learn about the Barnum project, meet the project team, see the collections of the Barnum Museum and the Bridgeport History Center, and to lead a project kickoff meeting. During the first visit on 8/12/2013, I learned that, while the two centers have rich and complementary holdings, the staff were quite unfamiliar with each others' collections and they didn't have a history of working collaboratively to make these materials available to users. I also understood from talking to project staff that they were all very proud of their holdings and excited about the opportunities that this joint project could afford their collections and their users.

The second visit, on 8/14/2013, was planned as a focus group with all of the project staff in attendance. In consultation with the project manager, I organized this event as a typical project kickoff meeting with the goal of creating a sense of joint purpose and commitment to the project itself, as well as providing some methods for the team to work productively together in the years to come. One such method is setting group norms, in which the team agrees upon shared expectations for behavior and a means to correct course when behaviours diverge from the shared norms. See the appendix of this report for the group norms that were agreed on that day.

I presented to the team how a "typical" digitization project might flow from start to finish, so everyone would have a general idea of the many varied and interdependent parts of a project like their own. We also discussed the usefulness of a project charter to clearly document the scope and limits of a given project, and agreed that one tangible and very useful output of this planning initiative would be a project charter describing a future digitization phase. In particular, the project charter lays out the following information:

1. Project name
2. Project description
3. Success criteria (how will we know when the project is done?)
4. Requirements (including deliverables, optional deliverables, and deliverables that are out of scope)
5. Project team (including roles)
6. High-level milestones and dates

Project charters sometimes also include a risk management plan, a change management plan, a communication plan, and some target budget information. The charter is an authoritative documentation

and reminder of the project team's collective understanding of what the project is and is not; it helps the team achieve what it set out to do and helps the project manager prevent or manage scope creep. The process of creating the charter is also a community-building activity, as the project manager guides the team toward a communal definition of what they will accomplish together.

We finished the 8/14/2013 meeting answering the question: "what do we need to know in order to plan well?" Based on information I had gathered during my first visit to the Museum and the BHC, I seeded the conversation with my observations about current gaps in team knowledge, potential risks to the project, concerns, misunderstandings, and questions. We then discussed each of these gaps in turn and added nuance and more questions where appropriate. The key issues raised can be sorted into the following themes:

1. Learning about each others' collections
2. The overarching project goals
3. Selection criteria and audience
4. Digitization and metadata standards
5. Staffing concerns and risks
6. Technical infrastructure and storage

In the next section of this report, I discuss each of these themes in turn.

Gaps and Risks

1. Learning about Each Others' Collections

At the project kickoff meeting on 8/14/2013, the team decided that the Museum and BHC would invite each other to an in-depth tour of their respective holdings. These visits would allow staff to get to know the each other better, learn about each center's holdings, see how materials are stored and learn about their conditions, learn how and to what extent these collections are cataloged and described, and begin to think about these collections as a combined trove from which to create a coherent digital collection. It's also important for each center to understand the differences in the physical conditions of the two collections (or sub-collections) and to start thinking about any particular issues that will affect digitization (e.g., size, shape, physical condition). As well, now is the time to start thinking about differences in cataloging levels or approaches between the collections or even within a collection, and what kind of activities might be planned to remediate these differences.

2. The Overarching Project Goals

The goals of the project will determine how content selection, description, and digitization are performed. The materials that might be selected to showcase a collection's holdings are not necessarily the same as those chosen to create a scholarly online resource. Digitization for preservation requires higher and stricter imaging, metadata, and storage standards and thus costs more than digitization for access only. At the 8/14/2013 meeting, the team agreed to two broad initial goals for the project: to broadly represent Barnum's celebrity and his connections to people, objects, and events of his time; and to highlight particular strengths of the Barnum Museum's and Bridgeport History Center's collections. These goals and how they will affect selection criteria need further discussion among the team. It was

decided that the project manager would help the team continue these conversations in order to ensure a clear, shared, and well-documented statement of the primary and secondary goals of this project.

At this meeting we did not directly discuss the question of preservation vs. access, but it is clear from the NEH proposal and related conversations that both preservation and access are goals of this project. In addition to some kind of joint website for the project itself, the project manager is also eager to contribute digital objects produced in this project to existing local and national collections such as the Connecticut Digital Archive (CTDA), the Connecticut History Online research portal (CHO), and the Digital Public Library of America (DPLA).

3. Selection Criteria and Audience

With the help of the scholar consultants, work was already underway at the Museum to review their holdings and create thematic clusters of objects. Another scholar had started reviewing materials at the BHC. A staff member at the BHC suggested another method for identifying themes and appropriate materials to illustrate those themes. All participants agreed that, considering the key goal of representing Barnum's connections to people, objects, and events of his time, it was best to conduct some kind of theming exercise across both centers' holdings to see what ideas emerged. Subsequent to identifying themes, project staff can then consider which materials best display or support the themes. In making these secondary selection decisions, staff will need to also consider such things as material formats and the physical condition of the materials, and decide which materials are so special that they deserve digitization as collection highlights.

While initial materials selection will be based on illustrating the themes, staff will also eventually need to consider the potential cost of digitizing some materials. Oversized items or things needing significant conservation treatment before digitization may make the project considerably more expensive or time consuming than other, less costly items. That said, selection should still start with the themes and future users' needs in mind, with adjustments made for time and cost only after research has been done to determine how much conservation and digitization will cost for the items selected. If need be, the project can be scaled back in the first phase of digitization and a second phase planned as needed.

4. Digitization and Metadata Standards

A key outcome of this planning phase will be the technical standards for digitization and guidelines for descriptive metadata creation. This project should rely on the documented and well-tested preservation imaging standards created by large institutions that have been doing digitization for a long time. Many of these documents lay out the various types of images that should be produced (master, service, thumbnail), technical standards for image capture, and the technical metadata collected during the time of digitization. In addition, imaging standards documents may address file naming conventions and even how quality assurance should be handled. I include reference materials and guidelines for digitization for preservation in the appendix.

The team will need to decide if they want to digitize some or all of their collections in house and, if in house digitization is considered, whether or not they can meet and maintain the chosen criteria for preservation digitization. For consistency throughout the process and to create compatible preservable assets between the two collections, it may be better and easier to have a vendor(s) do all the digitization,

while having in-house collection specialists do quality assurance. The BHC has previously worked with NEDCC on a small project to digitize a poster collection and were satisfied with their work. The team should query colleagues at other institutions about their experiences with vendors (for both conservation and digitization) and talk to other small cultural heritage organizations to see which vendors are responsive to and responsible with these collections.

Through this process, staff will be able to estimate the cost for the work ahead and build those costs into the project plan for the digitization phase. Questions staff will answer include:

- which items need conservation treatment?
- who will do the conservation?
- how much will conservation cost?
- how long will conservation take?
- where will digitization take place (in house? vendor? a mix?)
- which items can be digitized in house?
- if in house digitization is preferred, who will do the work and what training and equipment is needed?
- if outsourced, which vendor will be used?
- how much will the vendor charge?
- how long will vendor digitization take?

While somewhat dated (issued in 2000), the “NEDCC Handbook for Digital Projects: A Management Tool for Preservation and Access” is still a very valuable resource for planning a digitization project. It contains helpful sections on the selection process, a technical primer, project planning, and a full section on vendor relations. Combined with other more up to date resources on standards listed in the appendix, this handbook will be a useful guide to the project team in planning their work.

It was clear from the August meetings that the Barnum Museum and the Bridgeport History Center have different methods of documenting and describing their collections, and that even items within collections are not uniformly described. The amount and quality of item-level description will determine how discoverable this project collection is; without item-level description, users will not be able to search across the collection for individual items. And, as this project is intended to create a combined online collection and to share these digital objects with other collaborative initiatives such as the CTDA, CHO, and the DPLA, the team should review the descriptive metadata (DMD) recommendations or requirements for participation in these collaborative initiatives. Based on requirements for user interaction with the collection (search, browse, display) and the requirements for sharing, the team will need to agree upon a common DMD standard to be used for both collections, an appropriate cataloging level for item description, and create or supplement DMD for items that lack it. DMD creation can be facilitated by using digital collection management software, which provides a cataloging interface for items ingested into the system. A good CMS will also make it easy to export data and metadata in formats that can be shared with and ingested into other repositories. See the appendix for a list of digital content management systems.

5. Staffing Concerns and Risks

The Barnum project team is small and such a minimal level of staffing carries risks. There is a considerable amount of work to be done during this planning phase, including research, goal and

standards setting, collection evaluation (and possibly treatment), user needs analysis, inventory, and descriptive metadata creation. Communication and work will be assigned to all members, and just one member leaving could put the project in jeopardy. In order to mitigate some of the risk, the project team should agree to be as open with each other as practical about potential staffing changes, and also to document as much of their project-related knowledge and work as possible for others to use if need be. To the extent possible, the team should store their documents (both in-progress and completed) in a common project space rather than on individual hard drives. There are many free shared storage platforms, including Google Docs (which can store any file format, including Microsoft Word) and Dropbox.

6. Technical Infrastructure, Serving Collections, and Storage

The centers need to collaborate on a plan for long-term storage of the digital assets made during this and subsequent projects. They should consider the Minnesota Historical Society's 3, 2, 1 approach: make 3 copies; have at least 2 different kinds of storage media; 1 needs to be stored offsite and away from the other two. There are many offsite storage options, some of which also offer front-facing collection "publishing" interfaces for users to interact with collections. Amazon S3 (Simple Storage Service) is an example of the former, Past Perfect and CONTENTdm are examples of the latter. Before making any recommendations, I will need to learn more about how the centers want to manage their individual and combined collections and the requirements for serving those collections out to users. A few digital collection management software options are listed in the appendix.

The Project Plan

The project manager has created a "Project Goals" document that starts to lay out some of the key questions that need to be answered in order to create a project plan. A number of the points are already addressed here in some depth. I have also contributed my comments to this "Project Goals" document and won't duplicate all of them here. I will work with the project manager to create a project plan for this planning phase and consider how to assign and monitor tasks in order to move the team toward a charter and plan for the digitization phase.

In considering digitization, one suggestion is to sequence the digitization work so the purpose of the first digitization phase is for the team to spend their time getting the technical and workflow structures in place and doing some straightforward digitization, storage, and "publication" as a proof of concept. The team could leave more complex digitization work until later phases once they've got the baseline workflows (selection and conservation processes, vendors, DMD creation, ingest into collection management system, etc.) in place. One example is the BHC oversized manuscripts with multiple tipped in, fold-out additions to each page. These will be very complex to digitize and assemble digitally into coherent objects for users to read and make sense of. Determining how to digitize and assemble them will require a good amount of research time which, during the planning and first digitization phases, might be better spent getting the basic project infrastructure in place. (So the project charter for the first digitization phase would explicitly list certain types of materials as non-deliverables.)

Conclusion

The team is well poised to make this planning project a success. After the kickoff meeting, staff from the Barnum Museum and the Bridgeport History Center visited each others' collections and are now

considering how their materials are complementary. There are lots of knowledge gaps, as this report makes clear, and the project plan for this planning phase will identify which gaps will be filled by which team member. I am ready to contribute and I await direction from the project manager about how the rest of my time on the project will be best spent.

Appendix

A. Digitization Standards

Note: starred items (*) merit special attention

General Resources / Project Planning:

NEDCC Webpage on Digital Preservation

<http://www.nedcc.org/free-resources/digital-preservation>

[links to various resources; possibly useful for digging deeper]

* NEDCC Handbook for Digital Projects: A Management Tool for Preservation and Access

<http://www.nedcc.org/assets/media/documents/dman.pdf>

[printed in 2000; consult for sections on planning and process but not for imaging standards]

* see chapters on “Selection,” “Vendor Relations,” “Digital Longevity”

Federal Agencies Digitization Guidelines Initiative

<http://www.digitizationguidelines.gov/>

Library of Congress: National Digital Newspaper Program Guidelines & Resources

<http://www.loc.gov/ndnp/guidelines/>

[in case you’re considering digitizing any newspapers]

NEDCC Preservation Leaflets

<http://www.nedcc.org/free-resources/preservation-leaflets/overview>

* In particular “Outsourcing and Vendor Relations”

<http://www.nedcc.org/free-resources/preservation-leaflets/6.-reformatting/6.7-outsourcing-and-vendor-relations>

* Minnesota Historical Society: Digital Imaging for the Small Organization

http://discussions.mnhs.org/mnlocalhistory/wp-content/uploads/2011/05/guidelines_digital_for_small_organizations.pdf

[good for general principles for digitization, general introduction to the questions and issues, intro to process of digitization (including vocabulary), file naming, digitization standards, quality control, metadata, and storage of digital files]

* BCR's CDP Digital Imaging Best Practices Working Group: Digital Imaging Best Practices, Version 2.0

http://mwdl.org/docs/digital-imaging-bp_2.0.pdf

[see "Laying the Groundwork" section for overview of considerations before starting a project]

Imaging standards:

Federal Agencies Digitization Guidelines Initiative: Technical Guidelines for Digitizing Cultural Heritage Materials

<http://www.digitizationguidelines.gov/guidelines/digitize-technical.html>

Technical Guidelines for Digitizing Cultural Heritage Materials: Creation of Raster Image Master Files

http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image-Tech_Guidelines_2010-08-24.pdf

CDL: UC Shared Images Policies and Guidelines

<http://www.cdlib.org/services/dsc/ucsi/policies.html>

* CDL Guidelines for Digital Images

http://www.cdlib.org/services/dsc/contribute/docs/cdl_gdi_v2.pdf

[see "Guidelines for Access and Thumbnail Image Files" and "Guidelines for Digital Master Image Files"]

* BCR's CDP Digital Imaging Best Practices Working Group: Digital Imaging Best Practices, Version 2.0

http://mwdl.org/docs/digital-imaging-bp_2.0.pdf

[see "Guidelines for Creating Digital Images" and "Quality Control"]

Smithsonian Institution Archives

<http://siarchives.si.edu/services/digitization>

[Note: provides specs only for master file]

* Minnesota Historical Society: Digital Imaging for the Small Organization

http://discussions.mnhs.org/mnlocalhistory/wp-content/uploads/2011/05/guidelines_digital_for_small_organizations.pdf

[provides digitization standards for master files, web files, and thumbnails]

Materials Handling

National Archives Preservation Guidelines for Vendors Handling Records and Historical Materials

<http://www.archives.gov/preservation/technical/vendor-training.html>

Metadata:

Note: If the project decided to select digital collection management software for storage, description, and/or presentation, the tool will provide a descriptive metadata interface and structure. Storage and description needs more discussion before I can make any recommendations.

Minimal Descriptive Embedded Metadata in Digital Still Images

http://www.digitizationguidelines.gov/guidelines/digitize-core_embedded_metadata.html

CDL Guidelines for Digital Objects

<http://www.cdlib.org/services/dsc/contribute/docs/GDO.pdf>

Metadata submission guidelines (MSG) 2.0 for UC Shared Images hosted by ARTstor

http://www.cdlib.org/services/dsc/ucsi/docs/msg_ucsi.pdf

Note: Designed for UC libraries to create descriptive metadata to help users find their images. Includes lists of “required,” “highly recommended,” and “optional” descriptive metadata elements.

Digital Public Library of America: Metadata Application Profile

<http://dp.la/info/developers/map/>

Note: this profile is designed to crosswalk from existing standards such as Dublin Core (qualified and unqualified), MODS, and others.

Tools:

Planning for Digital Preservation: A Self-Assessment Tool

<http://www.nedcc.org/assets/media/documents/DigitalPreservationSelfAssessmentfinal.pdf>

* 20 Questions for Providers of Digital Storage Services

<http://www.nedcc.org/assets/media/documents/QuestionsToAskProvidersOfDigitalStoragefinal.pdf>

B. Digital Collection Management Software

Past Perfect <http://www.museumsoftware.com/>

[Online storage and an online collections database. Also includes option for creating virtual exhibits.]

* CONTENTdm <http://www.contentdm.org/>

[an OCLC product: storage + web-based discovery interface. Can be installed locally or on their servers. Windows-based digital collection tool.]

CollectiveAccess <http://www.collectiveaccess.org/>

[Web-based system for cataloging and publishing collections. But needs to be installed locally.]

[Note from Adrienne: Melissa and I attended a presentation about CollectiveAccess and will continue to explore it; at this point they both feel it would be an excellent choice for The Barnum to replace its PastPerfect database.]

DuraCloud <http://www.duracloud.org/>

[Cloud storage, but no option for publication. Services include “health checkup” for your files to guard against degradation.]

Preservica <http://preservica.com/>

[Cloud storage, but no option for publication. They do “active preservation,” content migration of at risk file formats.]

C. Group Norms

Barnum Project Group Norms

Agreed upon by project team, 8/14/2013

Respect:

- We will listen to each other and not interrupt.
- Team members will speak respectfully to each other
- Maintain a level playing field for participants: no censorship

Communication, Meetings, & assignments:

- Our meetings will begin and end on time.
- [Added by the team:] Every effort will be made to schedule team meetings when all members can attend (generally on Tuesdays and Wednesdays), and each member will make attendance at the meetings a priority.
- Emails with information for the whole group should be sent to everyone in the group. If there is any doubt about whether or not the communication is appropriate or ready for the whole group (e.g., draft reports), send it to the project manager.
- Email messages should be concise and those expected to respond should be named explicitly. Use directive language.
- We will make sure everyone has had a chance to speak.
- We will support our project coordinator's efforts to moderate discussions.

- Test assumptions and inferences; explain the reasoning behind your statements, questions, and actions
- Focus on the interests of the project rather than positions
- Share relevant and valid information (avoid factumptions: assumptions masquerading as facts)
- Use specific examples and agree on what important words mean
- Keep the discussion forward looking; don't be restricted by the past
- Engage in a continuous dialogue balancing advocacy with inquiry
- Be comfortable to challenge
- Each team member will keep all commitments by the agreed upon due date;

Problem solving, decision-making, and conflict resolution

- Consensus is preferred; otherwise we take a vote;
- Don't hold a grudge if you disagree
- Focus on message rather than the messenger; avoid ad hominem approach (none of this is personal)
- Don't rush difficult decisions

Maintaining norms:

- We will bring before the whole all group concerns regarding our group cohesion.

D. Notes from Project Kickoff Meeting (First Focus Group Meeting), 8/14/2013

1. Introductions (5 min):

Round robin with name, 1 sentence on role in the project

2. Goals of the day (5 min):

- A. Vinopal to meet everyone
- B. Establish project practices designed to create consensus among all team members.
 - a. This is a **process** not just a moment in time
 - b. This is the year to accomplish this (along with planning the actual project)
 - c. without team building a creating consensus the project won't happen (no matter how good the project plan is)
- C. Goals of my engagement over the coming year:
 - a. Planning to plan: Help you identify your *collective* goals and give you some tools for the process of working together through these two projects phase 1 planning project + phase 2 digitization
 - b. Help you identify your gaps (knowledge, process, documentation, etc.) and help you to fill them.
 - c. Outcome of phase 1 project = project charter for the phase 2 digitization project and a *realistic* project plan

- D. Today: start identifying gaps and making a plan to fill them (at the end of the meeting everyone should have homework!)
 - a. Send me away with a list of information you need from me
 - b. Define next steps for all of us

3. A "typical" digitization project from start to finish (10-15 min)

- A. idea!
- B. flesh out and share the idea; determine if it really is a project
- C. What is this project really about? Questions we ask ourselves:
 - a. identify materials
 - b. consider conservation issues
 - c. consider goals of digitization (will drive project plan)
 - i. read-only text: photography in B&W, lower resolution
 - ii. searchable text: transcription, OCR, etc.
 - iii. document the state of the object: photography in Color, high resolution
 - d. consider permissions:
 - i. willing/able to share with the world?
 - ii. permission for on-site use only?
 - iii. don't know? do you need to build permissions investigation into project?
 - iv. Want to watermark? How?
 - v. Creative commons licensing?
 - e. consider desired outcomes
 - i. dark archive
 - ii. in-house use only, by permission
 - iii. low-res images on the web
 - iv. giving it all away for free
 - v. web exhibit (selection + interpretation)
 - vi. available via finding aid (description but no interpretation)
 - vii. advertising
 - viii. share with other repositories: Connecticut History Online (CHO), Connecticut Digital Archive (CTDA), Digital Public Library of America (DPLA), etc.
 - ix. etc.
 - f. consider gaps that have to be accounted for in project plan:
 - i. collections need conservation treatment
 - ii. don't have in-house equipment/expertise for digitization? Identify vendors.
 - iii. don't have storage for digital collection?
 - iv. Don't have web server or software for serving up collections
 - v. Want but don't have item level description?
 - vi. Etc.
- D. Define the project – Project charter: formal description of project including scope, deliverables (and non) major milestones, project team, success criteria, etc.
 - a. Iterative process designed to build consensus among team
- E. Plan the project – ordered list of outcomes, tasks needed to achieve outcomes, who is responsible, time required, dependencies

- a. Iterative process requiring participation of entire team
- F. Do the project:
 - a. Prepare materials
 - b. Cataloging if required (ILS, finding aid)
 - c. Conservation treatment/processing
 - d. Determine digitization standards based on desired outcomes (tiffs, jpegs, checksums, etc.). Communicate these to vendor.
 - e. Determine naming scheme and how file names will link back to physical items – give physical items unique numbers. Communicate naming scheme to vendor.
 - f. Transfer materials to location for digitization (item tracking, registration). Include spreadsheet listing every item to be digitized plus unique name.
 - g. Digitization
 - h. Transfer digitized files to holding institution & upload to repository (asap, for safe-keeping)
 - i. QA of digitized files (iterative: re-do if necessary)
 - j. Transfer physical materials back to holding institution (inspection, check in, etc.)
 - k. “publish” – many different ways:
 - i. create website/exhibit (Omeka, Wordpress)
 - ii. cataloging/repository with links to files (PastPerfect, DSpace, Greenstone, ContentDM)
 - iii. finding aid with links to files
 - iv. send files to outside repository
 - l. celebrate

4. Why a project charter? (5 min)

- A. Why Projects Fail? (Borrowed from Tito Sierra)
 - a. Goals of project are unclear
 - b. Disagreement about the goals
 - c. Requirements are ambiguous or unrealistic
 - d. Project is inadequately staffed
 - e. Lack of consensus on roles
 - f. Proposed schedule is unrealistic
 - g. Scope is poorly managed or unconstrained
 - h. Project just doesn't make sense
- B. Charter is meant to intercept all of these problems: define project scope, cost (resources), time
 - a. Charter is also the time to bring consensus to the team; explicitly lay out what will & won't occur during the course of the project.
 - b. Goal of the coming year is to fill in your knowledge gaps and create a charter for phase 2

5. Group Norms (15-20 min)

- A. A project needs team cohesion to succeed
- B. Team members need guidelines they can count on; norms help to:

- a. Outline values; work in an atmosphere of mutual respect
- b. understand expectations of self and others
- c. smooth communication
- d. provide a means to clarify meaning, expose and resolve confusion or conflict
- e. building trust
- f. you have a lot of decisions to make over the coming year; these should help you do so
- C. questions/comments?
- D. Hand out examples of group norms
- E. Activity to select/create group norms

6. Uncovering gaps: what do we need to know in order to plan well? (1-1.5 hrs)

(Note: exposing risks, concerns, misunderstandings, questions)

- A. Learning about each others' collections:
 - a. Share written inventories
 - b. Each institution do a show-and-tell: walk-through, collection highlights, underscoring variety in each collection
- B. Overarching goals of the project – what is this project really about??
 - a. Need definition – will inform how we select what to digitize
 - b. How do we deal with collection incompleteness (e.g., ASPCA letters)
 - c. Helping people to make connections among things by highlighting networks, but not necessarily doing all the interpretation for them.
- C. How to select complementary materials from both collections to create a coherent whole?
 - a. Museum working on clustering objects
 - b. Identifying themes – collaborative exercise
 - c. How to make selections from subsets of collections (e.g., which subset of letters, of sheet music?)
 - d. Project plan & Conservation – select items that need conservation treatment and build that \$ and time into the plan? Select only items that don't need conservation?
 - e. Concerns about duplication – will we scan items that have already been scanned? Or published somewhere? Or things that are not very interesting? What standards will we use?
 - i. Don't want to let fear of duplication limit this project because it may limit the story you can tell with those objects.
 - f. How do our selection decisions fit with other available Barnum materials, online and not?
 - i. letters that have already been published in the Saxon anthology.
 - ii. Holdings at other institutions
 - g. Would it be possible to digitize some of the newspapers in the Center collection?
- D. Audience:
 - a. Audience for the digital collection – and how to make the project persuasive to the NEH for further funding;
 - b. If everyone is your audience then no one is your audience
- E. Digitization goals + standards
 - a. preservation-worthy digital files?

- b. Outputs: Websites, exhibits, finding aids? What else?
 - c. What digitization standards are required to meet these goals?
 - d. Which vendor(s) to use? (BHC used NEDCC for posters)
 - e. Naming/numbering scheme for vendor to use for filenames; matching objects up with files.
 - f. What to do about complex objects with multiple, sequenced files (books, 3D objects, etc.)?
 - g. Where does transcription fit into this project? Maybe not part of first phase of digitization?
- F. Cataloging goals + standards:
- a. What cataloging system(s) will be used?
 - b. Will the objects be combined into a cohesive collection? how will DMD be shared? What level of cataloging at each institution? Will these levels be complementary? What will users be able to do based on DMD?
 - c. Will there be finding aids?
 - d. How much descriptive metadata is available/will be created? When?
 - e. how the two institutions charge differently for use of their materials. Public library vs. museum foundation obligations and concerns.
- G. The future Barnum digital collection:
- a. Will there be one combined digital collection of Museum+BHC materials?
 - b. How will you access/use each others' digital collections?
 - c. What agreements are necessary?
- H. Preservation:
- a. Must both institutions have the same digital preservation goals/strategies?
 - b. Existing infrastructure? Which preservation systems? Strategies?
 - c. Leverage regional institutions for preservation?
- I. Technology infrastructure:
- a. Better way to store data – cloud service?
- J. Permissions:
- a. do you want to control what people do with your images? How?
 - b. Watermarking, low-quality images, rights info in image headers, other?
 - c. Creative commons licensing?
- K. U Conn didn't get their grant to create a statewide collaboration (including workshops for partners). Museum expected to glean info about digitization standards.
- L. Risks: need to be aware of risk when some knowledge resides with just one person. If that person leaves, the knowledge leaves with them.
- a. Mitigate this risk by having team members document what they learn and share with others.

7. Next steps & Wrap up

- Start filling in gaps just identified.
- Vinopal to write preliminary report, including notes from today.

- Project coordinator to create project tracking method to share regularly with team so everyone knows who is doing what and when. (Vinopal can help establish process)
- Project Coord: set up regular team meetings to track progress and share info. (Vinopal can help establish process)

Team:

- abide by group norms
- start working on your to do items
- help project coordinator keep the project moving forward

Next steps:

1. Meeting to talk about theming and selection process:

- what is the project really about?
 - what will the criteria be for selection
 - get some idea of what cost might be for different types/classes of objects
 - theming exercise (Michael Bellacosa's theming grid idea)
 - who is the audience for this project: everyone, scholars, NEH, donors, etc.?
- (This meeting should take place after Kasey Grier issues her report.)

2. Show and tell of each others' collections.

Should include sharing any collection documentation, inventories available.

Outcomes: Agreements reached today

1. Team agreement that goal of project is to broadly represent Barnum and his connection to people, objects, events. (project is documenting celebrity, connections, personal lifestyle, political engagement, etc.)
2. Team agreement that goal is not just to highlight Barnum's life, but also to highlight strengths of the Museum's and Center's collections.

(These agreements should become a permanent part of the project documentation and be integrated into the implementation project charter.)

Barnum Project: Final Report of the Digital Project Consultant

Issued by Jennifer Vinopal, 6/24/2014

Introduction

In this report I review the progress to date on the project goals set out at the first team meeting on 8/14/2013 (which were congruent with the goals specified in the grant narrative), describe the next steps for the project, make recommendations for successfully accomplishing these next project phases, and reaffirm the viability and value of this project for future funding.

Review of work done during this grant

Based on the grant narrative and my initial interviews with team members in August, 2013, in my 9/7/2013 Interim Report I developed a list of gaps and potential risks to the project. In order to resolve or diminish these gaps and risks over the course of this planning project, and to prepare the participants for a subsequent digitization phase, I highlighted six broad goal areas that the team then discussed and agreed upon at the project kickoff meeting on 8/14/2013. The goals were to:

1. Learn about each others' collections, including the physical condition of materials, and potential issues related to digitization.
2. Identify and agree upon the overarching objectives of the project.
3. Establish selection criteria and audience.
4. Research and decide on digitization and metadata standards, including file naming structure, etc.
5. Evaluate staffing concerns and risks for the current project, future projects, and the ongoing care and maintenance of the data produced for preservation and access.
6. Develop a plan for technical infrastructure and storage, including preservation and dissemination.

Over the course of the last nine months, substantial progress was made in all six of these areas. They are addressed in turn below.

1. Learn about each others' collections:

The scholar-advisors, Doctors Kasey Grier and Neil Harris, helped to expose the holdings and strengths of both collections to all team members and to create criteria for item selection for the next phases of the project. They reviewed and evaluated the collections, assessed the research value of individual items, produced descriptive information where lacking, and helped the team to establish priorities for digitization (based on item condition, provenance, historical association, possible audiences, cross-disciplinary potential, relationships among objects, etc.). Dr. Grier worked with the project manager to develop and implement a rubric worksheet to rank objects in the Barnum Collection and some objects from the Bridgeport Historical Center (BHC), based on potential research interest. Data from the rubric worksheets was assembled and presented in an Artifact Assessment spreadsheet, which allowed for sorting by object score (rank), thematic associations, type of object, etc. They sought to identify a variety of source objects by taking into account each object's association with points in Barnum's life (early, middle, and late) and its illustration of key themes (domestic life, celebrity and fame, civic life, social activism, etc.). Dr. Harris helped to identify and describe some key manuscript items in the BHC collection, in particular the Salmagundi and the early ledger book. The results of these investigations were shared with all team members and documented in the scholars' assessment reports. The descriptions produced by the scholar-advisors can serve as the basis for finding aids as well as the necessary item-level description for objects that are eventually digitized and made available to the public.

2. Identify and agree upon the overarching objectives of the project

At the 8/14/2013 project kickoff meeting the team agreed that the two key goals for a future digitization project should be to highlight Barnum's life and to showcase the strengths of the Museum's and the BHC's collections. These two principles guided the work of the scholar-advisors as described in #1.

3. Establish selection criteria and audience

Selection criteria based on potential research value was established as described above in #1.

But other criteria come into play when selecting materials for digitization, in particular the physical integrity of the materials (e.g., need for conservation treatment, need to disband before photography) and the complexity of digitization (e.g., single image vs. complex digital object, size of object). Some of the more compelling materials will require conservation treatment or will be difficult to digitize and present to users. For example the bound manuscript materials, which have fold-out pages, will be complicated to photograph and to assemble digital surrogates that might give the user a sense of how the original, physical item looks and functions. The team must take these issues of conservation and complexity under consideration when making decisions about how to spend their time and money in the next stages of the project. The team agreed that digitization should start with the easier-to-document items in order to make quicker progress through the collections and get a good chunk of materials digitized and online. As well, the CTDA can't yet accommodate complex (i.e., multi-part) digital objects, though this is on their development plan and is expected to happen within the next few months. While the team has been thinking all along about potential audiences for an online Barnum collection, we discussed audience at some length at the 5/7/2014 team meeting. In addition to scholars and the general public, the team was particularly enthusiastic about the potential for teachers and school children to take an interest in the cross-disciplinary and, frankly, fun material in these two Barnum collections. The Barnum Museum already engages with school children through their visitors' program, and is thinking more broadly about building partnerships with school teachers. If chosen and framed right, these digital collections of primary source materials could be exploited by teachers for curricula teaching students how to connect historical source objects to evidence-based writing (a key goal of the Common Core Standards). The Connecticut Digital Archive (CTDA), where the digitized objects will reside, may also be used to create subcollections of teaching resources (guides, syllabi, etc.) that would encourage and facilitate these uses.

4. Research and decide on digitization and metadata standards

Over the course of this project, the Digital Project Consultant provided advice and resources about digitization and metadata standards, including best practices for digitization developed by key research and national library programs, various descriptive metadata standards, and file naming schemes. A key activity of this planning project was to participate in the project planning for and testing of the CTDA. Over the course of the partnership with the CTDA and with hands-on experience in the system, BHC and Barnum Museum staff learned that the system supports standard metadata schemas and that any existing structured descriptive metadata can be crosswalked to the CTDA metadata scheme. For example, the BHC has content and metadata stored in PastPerfect. CTDA staff were able to successfully migrate BHC records from PastPerfect to the CTDA standard. In order to expedite data upload, this summer BHC staff will learn how to cross-walk and upload their descriptive metadata themselves rather than relying on CTDA staff. They are also providing CTDA staff with feedback on the system's functionality and will supply them with some guidelines to help future users. In digital preservation projects, it is crucial to follow a consistent file naming scheme in order to assign each digital object a unique name to avoid name clashes and potential overwriting, and to track objects over time. There are a wide variety of ways that digital libraries name their files: from assigning machine-generated numbers to following an elaborate convention to create human-readable file names. The project manager and Digital Project Consultant worked together to create for the Barnum Museum a file naming scheme that meets the needs of the project team (human-readable names with certain documentary requirements to facilitate tracking) and can be easily followed in order to assign unique names. The project manager has shared these file naming guidelines with the BHC staff so they may develop a regular scheme for their own materials.

5. Evaluate staffing concerns and risks

While the original staffing concerns in the 9/7/2013 Interim Report focused on staff availability for the current stage of the project, we also wondered how realistic it was to expect that these two small institutions would be able to support the resource-intensive activities of ongoing preservation and dissemination of their assets once the digitization phase was complete. This is a very common concern among small, cultural heritage institutions. Given the levels of staffing and infrastructure required to devise and carry out an effective long-term preservation plan, including regular monitoring and format migration, the Digital Project Consultant investigated suitable options for outsourcing this preservation activity and the delivery of access copies. The CTDA offers a best-case scenario for the BHC and the Barnum Museum, as it is a regional solution designed specifically with these kinds of institutions, materials, and needs in mind. See #6 below for more. The small size of these two organizations and modest amount of staff is also a consideration for staffing future project phases. These concerns can be mitigated by strategically funding part-time positions to help build capacity for some activities during the digitization phase. This question is addressed in more detail below, in the “Next Phases” section.

6. Develop a plan for technical infrastructure and storage

The BHC and the Barnum Museum have settled on the CTDA as the home for their digital assets. The CTDA, currently under development by the University of Connecticut, has a mission to provide long-term digital curation and delivery services to Connecticut-based libraries, archives, galleries, museums and other memory institutions. It is built on the widely-adopted, open source Fedora Commons architecture which was designed nearly two decades ago by and for cultural heritage institutions, and is thus well-positioned to leverage other open-source tools built by the large Fedora developer community to integrate with this platform (<http://fedorarepository.org/about/history>). The CTDA accepts various content types (images, audio, video, text) and, while it can't do so now, will eventually be able to handle storing and displaying complex digital objects (e.g., a single object with multiple image views). A critical goal of the CTDA is to become a certified Digital Preservation Repository by 2017. It will ensure the safe, long-term storage of digital assets contributed by cultural institutions with redundant backup systems, and the migration of files, when necessary, to new formats. As well, the CTDA will be the future home of Connecticut History Online (CHO), to be renamed Connecticut History Illustrated. Originally funded by IMLS, CHO is a curated platform of 18,000 digital primary resources contributed by about half a dozen CT museums and research libraries. Fourteen years ago, CHO began with prints, maps, and photographic materials and in the last few years has expanded their digital collection to include three-dimensional artifacts and manuscripts. The number of contributor institutions has expanded as well. CHO/CHI will include the Barnum Museum and BHC's digital objects when they are ingested into the CTDA and CHO/CHI has been migrated to CTDA.

The BHC and the Barnum Museum both established test collections in the CTDA for this project and are listed on the CTDA website as content participants. Over the course of this project, both teams have tested the CTDA interface by uploading test images from their collections and describing them, and are providing the CTDA with extensive feedback on their user interface. As early adopters of this service and active participants in its development, one of the things that the BHC and the Barnum Museum can offer back to the user community is support materials (guides, workplans, crosswalks) to help institutions who are next in line to join the CTDA. The project team is eager to contribute these materials and feedback as they get more experience with the system. In addition to offering storage and preservation services, the CTDA also provides various public access options. There is a default collection interface and, for a fee, the CTDA will work with participants to develop custom-built websites to deliver their content. The CTDA also has plans to provide full integration with tools such as Omeka and other data visualization environments, and will act as a gateway to the DPLA, thereby extending the reach of the Barnum Project materials to an international audience. The Barnum project partners are very fortunate to have the CTDA as an archival and distribution option. Very few small, cultural heritage institutions in the US have any such large-scale, well-planned options at their disposal and instead are left to develop home-grown

preservation and dissemination solutions, frequently with varying levels of success and with quite doubtful long-term prognoses.

Next Phases of the Barnum Project

Below I describe the three upcoming project phases that follow on this planning period:

1. seeking funds for continuing the project;
2. the interim phase between the close of this project and the start of funded digitization;
3. the digitization project itself. (The project team talked about these phases during our 5/7/2014 meeting and agreed on goals and some key deliverables for each of them.)

1. Seeking funds for continuing the project

The project team agreed that, based on the many successes of the current planning initiative, the ongoing enthusiasm and engagement of the Museum and the BHC staff, the availability of a viable preservation and dissemination infrastructure through the CTDA, and the unique contribution to research and teaching that this virtual collection will offer, this project should continue towards implementation. To do so, funding is required; the project manager is already working on a draft grant application to the NEH which the Digital Project Consultant will review. This implementation phase will include conservation of select items, cataloging, digitization, the deposit of materials into the CTDA, and their dissemination to the public. With the knowledge on hand at the two institutions plus consultants for technical advice, conservation, cataloging, and digitization, this project team has sufficient expertise and the necessary skills to accomplish this production phase of the project.

Because of the small staff size of these two institutions and the considerable workload existing staff carry in order to keep their operations going, I strongly recommend that for the next project phase, they request funding for staff to help with two key activities: cataloging (creating metadata) and coordinating technical activities (e.g., ingest of metadata and content, implementing crosswalks, managing file naming). Given the scope and pace of the project, grant funding for a dedicated part-time metadata specialist and a part-time technical coordinator would probably suffice and would ensure that these crucial project activities won't be delayed because of other work assignments.

The project manager has very ably managed this planning phase of the project and is thinking strategically about staging the implementation phase to accomplish the maximum amount of work during the funded period. Based on the evaluation rubric developed during the planning phase, the team identified over 150 items from both the Museum and the BHC's collections that fell into the top tier of objects under consideration for digitization. Since the scholar-advisors kept item condition and complexity in mind as they did their evaluations, this top tier also represents the easier of the materials to digitize. It does not include the manuscript materials, which may require more conservation treatment and are also complex objects that will produce complex digital surrogates. Staging the digitization such that easier objects are photographed first and difficult objects last will be beneficial for three reasons: the team will get the experience and satisfaction of first moving more rapidly through the "easier" items; more objects will thus be accessible via the CTDA at the end of the digitization phase; delaying the complex items will give the developers of the CTDA more time to implement the capacity to handle (store and display) multi-part digital objects. The team already has preliminary estimates for conservation treatment of the items needing attention, and for digitization. The time estimates and the prices seem realistic and, by engaging consultants with the needed skills listed above, this work could be done within the scope of a two-year implementation project.

2. Interim time period, between grants

The period between the end of the planning grant and the start of an implementation phase will provide the team time to carry out tasks that were identified during the planning period as necessary groundwork before starting digitization. This work includes:

- ☐ developing a crosswalk to migrate the BHC's existing descriptive metadata from the current PastPerfect storage solution to the CTDA;
- ☐ consultation with NEDCC on a strategy for preparing some of the BHC's photographs for digitization;
- ☐ reviewing the Artifact Assessment spreadsheet to verify that all of the BHC items under consideration for digitization are included and the evaluation rubric applied;
- ☐ finalizing the list of top tier items for initial digitization, and of "second tier" items in case the project moves apace and more can be done;
- ☐ deciding on an approach to assigning subject terminology (Library of Congress or other), so that the digital items from these two collections will together represent a coherent whole that users will be able to easily search and use;
- ☐ cataloging as much of the BHC materials as possible before the start of digitization;
- ☐ finalizing the file naming scheme for the Barnum Museum's items and developing one for the BHC;
- ☐ ongoing testing of the CTDA, including uploading individual and bulk records, providing CTDA staff with feedback, and writing appropriate guides for other institutions to use;
- ☐ while not required for the success of the digitization phase, during this timeframe the BHC intends to create a finding aid for their collection and make it available online;
- ☐ developing a finalized project charter, agreed upon by all team members, and creating a detailed project plan for the digitization phase.

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- ☐ when technically feasible, implementing Collective Access (to replace PastPerfect) at the Barnum Museum for cataloging their objects. Note: the Museum intends to be part of a group of pilot adopters in the state who will work with the CTDA, the Connecticut League of History Organizations, and CHO to standardize collections practices among these institutions by collaboratively using Collective Access (not unlike the NovaMuse project, <http://www.novamuse.ca/>)

3. Digitization grant

The long-term goal of the project team is to digitize as much of these two Barnum collections as possible because there are hardly any Barnum-related digitized primary source objects of scholarly value available online today. The project manager and Dr. Grier did an extensive Web search to find other online collections relevant to the Barnum project either because of the content (e.g., the Ringling Museum website, which lacks any descriptive information of the thumbnail-sized images it contains) or because they provide a good model for the kind of virtual collection the project team wants to create. They discovered that there is very little available on the Web that is illustrative of Barnum's life and very diverse careers, and is also presented in a manner suitable for teaching and scholarship. However, they did identify the Victoria and Albert Museum's V&A online collection as a very good model for what they want to create (<http://collections.vam.ac.uk/>). The V&A collection is presented in a user-friendly way for easy browsing and searching, but also includes advanced searching options based on the thorough metadata included for each object. This is a model for the Barnum Project to strive for.

At the 5/7/2014 team meeting, we identified deliverables for this digitization phase.

Key deliverables:

- ☐ All top tier materials selected for inclusion will be catalogued, appropriate conservation treatment performed, and digitized according to accepted preservation digitization standards.

- ☐ All items and their metadata will be uploaded to the CTDA and made available to the public through the default user interface.
 - ☐ Each institution will have its own separate collection in the CTDA.
 - ☐ The manuscript materials (the Museum's Letter copy book and the BHC's Salmagundi manuscript) will be disbound, digitized, and rebound, and will be available through the CTDA.
- Optional/contingent deliverables:
- ☐ If Connecticut History Online has been migrated into the CTDA and is available before the end of the grant period, the Barnum project items of both institutions will also be made accessible to the public via the CHO.
 - ☐ If digitization of top tier items proceeds apace, the team will continue to digitize lower-ranked items from the Artifact Assessment spreadsheet as time and money permits.
 - ☐ If the CTDA cannot yet handle complex digital objects by the end of the grant, the team will identify a temporary, safe storage solution for these objects until the CTDA can accommodate them.

Non-deliverables:

- ☐ During this next phase of the project, the team will not develop a dedicated, combined website to host materials from both collections. This may be a goal for a later phase of this project. The current preference is to first deliver the collection materials via the CTDA and CHO.
- ☐ While the team recognizes how useful it would be to provide transcriptions of the manuscript materials, these will not be produced during this phase of the project. The team did discuss the possibility of a later phase during which the transcription may be crowd sourced, possibly in partnership with elementary school teachers who want to engage their students in hands-on projects working with manuscript materials.

Conclusion

While it's always challenging for a new team to learn to work together on a project, this planning period allowed the participants to learn a great deal about each others' collections and work practices, and to develop a collective excitement about and commitment to the process of developing a shared digital collection. Through their investigations into their own collections and their research of the meager digital record of Barnum artifacts currently online, the team has determined that digitizing their materials would be of great value to research and teaching in humanities disciplines. Dr. Neil Harris has written of the various aspects of Barnum's life that have enticed researchers over the generations: advertising and showmanship, race, animal rights, the press, politics, religion, collecting and museum making, natural history, philanthropy, entrepreneurship, and more. These themes continue to resonate deeply in our culture today, and Barnum's many and seemingly contradictory facets seem as relevant as ever to humanistic inquiry. This team has good leadership in their current project manager, a viable repository with delivery options, concrete and realistic goals for the coming project phases, and a plan of action to accomplish them. With funding, this project will be a successful and valuable contribution to our national digital heritage.

Artifacts Assessment and Report

Prepared by Dr. Katherine C. Grier

Final report, NEH HCRR “Foundations” Grant, June 2014

Planning for a Collaborative Digitization Project with The Barnum Museum Foundation, Inc. and Bridgeport Public Library’s History Center

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SUMMARY

The Barnum Museum Foundation, Inc. and the Bridgeport Public Library’s History Center hold collections of international significance and interest in a wide variety of media. These relate to the life, entrepreneurial activities and civic engagement of P.T. Barnum, and to the lives of performers, both human and animal, who populated his various enterprises including the several incarnations of the American Museum, the international tours, and the circus. The collections include significant manuscripts, particularly the Barnum letter copybook; a wide range of paper ephemera including rare handbills, booklets, posters, concert programs and tickets; large-scale circus posters; photographic portraiture of Barnum, his family, and many performers; and three-dimensional artifacts including items of dress clearly associated with their owners, decorative arts and works of art with clear family provenance, and vehicles including carriages created for the famous Little People Tom Thumb and Colonel Nutt. The collections engage a variety of humanities themes, not only in relation to Barnum but in terms of broader questions about the construction of personal identity in nineteenth century America; popular education; the commercialization of entertainment and the rise of cultural entrepreneurship; the development of modern celebrity; and popular understanding of the exotic, including animals from faraway places as well as people.

The work summarized in this report provides the scaffolding for ongoing work, including an implementation grant from NEH. The digitizing project will accomplish several things. First, it increases availability of collections that are not all readily available to public audiences, and some of which are too fragile to see frequent use or exhibition. Second, it brings together both artifact collections and manuscript and printed material located in different buildings and typically not in dialogue. Finally, the curated nature of the materials proposed for digitization, and access through the Connecticut Digital Archive and the proposed interface, will encourage people to do more than surf collections; it will encourage students and lifelong learners to bring these different collection together to create their own narratives.

INTRODUCTION

In July 2013, I began service as a consultant to the Barnum Museum’s planning grant from the National Endowment for the Humanities’ Humanities Collections and Reference Resources Program. Over the course of several visits in 2013 and 2014, curator Adrienne Saint-Pierre and I conducted onsite examination of the Barnum-related collections with a more detailed evaluation of 237 items of visual and material culture in the collections of the Barnum Museum and the Bridgeport History Center of the Bridgeport Public Library. The focus of my evaluation was artifacts and ephemera associated with P. T.

Barnum's career and personal life, and the people and animals he made famous, such as Charles Stratton and his wife Lavinia ("Gen. and Mrs. Tom Thumb"), singer Jenny Lind, Jumbo the elephant, and others.

The underlying framework for this process is the set of humanities themes created by the Scholars' Roundtable convened by the Barnum in 2012. The participants articulated a set of potential interpretive frameworks for exhibitions, programming, and digital content in the reopened Barnum Museum. These themes were based on the central premise that "*The life and work of P.T. Barnum can be used as a lens for examining some of the central themes in American history, with his biography providing multiple narratives that can be set in national and international contexts.*"

Humanities themes articulated by the scholars included the following:

- *the fluidity of class and opportunity in the nineteenth century;*
- *the rise of commercialized leisure;*
- *popular interest in learning and culture and the gradual development of cultural hierarchy;*
- *the development of American consumer society;*
- *the role of the entrepreneur in the American economy;*
- *the challenge of ethnic and racial diversity in American life;*
- *urbanization and the rise of the American industrial city;*
- *the evolution of interactions with and understanding of animals and the natural world broadly;*
- *the complex relationship (politically, economically, and in the popular imagination) of the United States with both the Old World of Europe and the "exotic," and more culturally distant, worlds of Africa, the Middle East, and Asia.*

Our work for this grant demonstrated that the artifact and visual collections are particularly strong in relation to some of the humanities themes articulated by the scholars' roundtable:

- **commercialized leisure**
- **popular interest in learning and culture**
- **entrepreneurship, opportunity and innovation**
- **class, self-presentation and opportunity** as it is embodied in the biographies of both Barnum and the individuals he promoted or who worked for him as performers in his various enterprises.

EVALUATING THE COLLECTIONS: PROCESS

Using a rubric developed by Adrienne Saint-Pierre (based on her experience of the collection and prior conversations as part of the earlier scholars' roundtable meetings), we prioritized items for possible digitizing using a single-sheet form. In employing this strategy, we assessed their ability to support some of the humanities themes that had been articulated by the scholars' advisory committee, the related assessment of manuscript holdings offered by Professor Neil Harris as part of this grant, and by their potential interest to a variety of public audiences. We made a point of evaluating provenance (history of ownership), which was especially important with the artifacts relating to Tom Thumb. We also noted the chronology of the items in relation to the early, middle and late stages of Barnum's career. The results of this process have been collated into an Excel spreadsheet.

To help us determine the potential research value of the Barnum's digital collections, we sought other Barnum-related materials available online. An examination of these Barnum-related collections discovered that they do not feature the kinds of artifacts in our two collections. In most cases, Barnum items are simply listed in special collections of archival materials that are not digitized. The Ringling Museum of Art offers images of over 4,800 circus posters in its collection; limited metadata fields make topical research difficult, however. Online collections consulted also include The Circus World Museum in Baraboo, Wisconsin; the New-York Historical Society; the Library of Congress; the New York Public Library; Special Collections in Firestone Library at Princeton University; and the Victoria & Albert Museum in London. The Bard Graduate Center's archived exhibition website for exhibition "The Circus and the City" reproduces several significant Barnum items from collections including the Witte Museum in San Antonio, Texas; these cannot be searched at the item level. While it is a reconstruction, the best representation of Barnum's collections and early career remains the Lost Museum website created and published by the City College of New York's American Social History Project/Center for Media and Learning: <http://www.lostmuseum.cuny.edu/home.html>. ASHM developed this site between 2002 and 2006. We also found the Victoria & Albert Museum's online collection (which contains 13 Tom Thumb items and 96 objects associated with Jenny Lind) provided a useful template we could consider adapting because of its use of "Object History" and "Historical Context" notes in their cataloging. The substantive metadata and contextual information really make this an excellent model for material that crosses disciplines, as in the case of these collections.

Over the course of the project, Adrienne Saint-Pierre (Museum Curator, and Project Director of this grant) and I improved our skill at evaluating collections using the form; this is, I think, typical for a process that takes place over time. Thus, our ratings should not be considered the final word on priorities for digitization, although we did a good job identifying constellations of relating items. I recommend that the members of the project committee revisit the list as more items are inventoried at the BHC and additional items come into the Barnum collection.

IDENTIFYING HUMANITIES THEMES IN THE COLLECTIONS

While there are multiple possible interpretative frames for individual collections items, we looked for particular collection strengths that made sense from a pedagogical standpoint, thinking of potential users of CTDA who are not experts in material or visual culture. We call the groupings we made "constellations," with the idea that the catalog entries and associated plans for user activities (available through the CTDA and the Barnum and Bridgeport History Center websites) would help non-experts construct meaningful narratives around the digitized collections. Several constellations of material and visual culture items emerged that relate to the broad humanities themes identified in the Scholars' Roundtable. These constellations are:

- **celebrity and fame (in the expanding world of commercialized leisure and expanded print media)**
- **enterprise and innovation**
- **Barnum's life in Bridgeport, including civic life and private/family life**

Other constellations may be developed as the project progresses and more items are considered for inclusion. Further, the metadata entered for each object will enable researchers to use the collection in more traditional searches (key words such as *circus*, and *animal*).

Group I. Celebrity and fame.

The collection supports examination of the concept of celebrity and the results of fame on the lives of individuals through a number of biographical case studies. Apart from Barnum himself, the richest grouping relates to the little people in the developing Barnum entertainment empire but there are many other thought-provoking items relating to the people who worked for Barnum at both the American Museum and in the later circus companies.

- 1) **Artifacts, images and paper ephemera relating to “Tom Thumb” (Charles Stratton) and the other “little people”** who worked with Barnum including “Commodore Nutt” and Lavinia Warren, Charles’ wife. This collection includes artifacts as large as carriages and as small as fragile paper booklets. Personal possessions belonging to Charles and Lavinia Stratton, gifts made to Tom Thumb during his visit to England, the Fairy Wedding photo album, the original head from Charles’ Stratton’s gravestone and portraits (photographic and painted) of all the individuals are also included, as are paper items associated with publicity for performances. This collection relates both to the construction of **celebrity** in the emerging mass popular culture of mid-nineteenth-century America. This collection also speaks to Barnum’s business practices and his use of publicity (**enterprise**).
- 2) **Jenny Lind.** This subcollection contains the bust of Jenny Lind owned by Barnum and a number of items (prints of portraits, a girandole set, a ceramic “Staffordshire” figurine) that reflect public interest in her. The joint collection is also strong in programs, songsters and tickets from Jenny Lind’s concerts, and even contains comic material.
- 3) **Human exhibits at the American Museum and in the circus.** This sub-collection includes a rare handbill about Joice Heth, prints, posters, period photos in several formats, and booklets that human “exhibits” and performers themselves sold to visitors at the American Museum, presumably to make additional money.

Group II. Barnum’s enterprise and innovation, including publicity and marketing.

The groupings of artifacts under this category relate to both to P.T. Barnum’s life and to a second core humanities theme articulated by the roundtable of scholars: popular interest in education and the development of cultural hierarchy in Victorian America. Many of these items are paper. Some are as small as tickets to events.

1. **Barnum’s early promotional efforts: Joice Heth.** The collection of the BHC includes an extremely rare broadside promoting the exhibition of Joice Heath, an elderly African-American woman who Barnum promoted as “George Washington’s nurse.”
2. **The American Museum.** This significant grouping includes catalogs, handbills, booklets, prints and photographs relating to the American Museum and its exhibitions, along with tickets, booklets sold by human exhibits to make additional money, and other paper ephemera. (**also relates to enterprise subgroup; celebrity and fame**)
3. **Promotional material relating to the circus.** This includes a group of posters owned by BHC that have been conserved and digitized in a prior project along with an array of rare, extremely fragile ephemera such as “rat sheets,” large-format black-and-white handbills printed on thin, low-quality paper.

4. **Jumbo.** Artifacts and paper items relating to Jumbo, including a slice of his tusk taken after death, prints (including on textiles) and posters; and paper ephemera capitalizing on Jumbo's popularity.

Group III. P.T. Barnum in Bridgeport: home life and civic activities.

In our Excel spreadsheet, this is broken out into two distinct categories, but I recommend that we consider it as a single category when planning related interpretive activities. It includes personal objects belonging to P.T. Barnum; images of Barnum's series of mansions; examples of decorative arts that represent the contents of his houses and his taste; photographs of the family; and portraits of Barnum and his wives. It also includes artifacts that document Barnum's civic activities in the Bridgeport area.

While some of these artifacts were preserved as relics of a "great man," time spent working with them suggests that objects in this grouping reveal things about P.T. Barnum that are not evident in his carefully studied self-presentation through print. In some cases, as in the china set bearing the coat of arms, objects provide nuance to a self-reported anecdote where Barnum both embraces and tweaks the idea of family standing embodied in a coat of arms. In others, the artifacts reveal Barnum's pride in his material success; the family's interest in the social rituals of the day (social dining, tea parties, parlor social life); and their taste, which was simultaneously congruent with other families of rising wealth and more theatrical than was the norm.

1. P. T. Barnum personal effects. This subcollection contains clothing and personal objects that represent both Barnum's taste and his strategies for self-presentation. Items include a Connecticut-made top hat (recently conserved) worn by Barnum early in his career and its matching case; a large gold ring with an image of Iranistan, Barnum's first mansion; examples of the small memorandum books that Barnum used daily (he even had himself photographed with one in hand, suggesting that he knew that they were famous), and one of Barnum's heavy sealskin-lined coats (one appears in a famous photograph). Several extremely fine, monogrammed white shirts and handkerchiefs also survive, suggesting that Barnum took some pleasure in dressing well.

2. Barnum's china and the gilt-silver tea service. A selection of these items should be included because of the story of their acquisition, published in Barnum's own memoirs. The items date to his travel in the 1850s with Tom Thumb, where he came upon an auction of the effects of an unnamed (in Barnum's memoirs) "Russian nobleman" whose effects were being auctioned at his palace in Paris. (Research so far on Russian coats of arms suggests that this is consistent, although the auction has not been identified.) Barnum bought the china and gilt tea service, and adopted the coat of arms painted on the pieces as his own.

3. Barnum family silver and art objects. Purchased while he was planning to build Iranistan, the surviving family silver represents the Barnum family's expanding consumption and self-presentation through rituals of social life, as it grew more prosperous. Some of the pieces are depicted in later photographs of Barnum mansions. Large oil portraits of Barnum's wife, Charity, and another of their daughters were also painted at the time Iranistan was being built; these fine portraits by Frederick Spencer have recently received conservation treatment. The museum also owns a couple of rather mysterious paintings purchased by Barnum. Their condition is problematic due to dirt and darkened varnish; cleaning would be required prior to photography for digitization. However, sculpture owned by Barnum

is in condition for photography; I recommend that at least one example, the bust of Jenny Lind, be included in the first round of digitization.

4. Objects representing Barnum's civic life in Bridgeport. This sub-collection is small but contains significant objects, particularly an award for work on behalf of temperance and a large-format poster called "Scenes from a Long and Busy Life" that may be the only one surviving in a public collection. And, of course, the Barnum Museum's historic building itself represents his sense of the uplift and popular education that ideal civic life should encompass. For this reason, I recommend that the building exterior, including details of the iconography on the exterior trim, be photographed and included in project.

5. Photographs and other images of Barnum mansions. All three mansions are represented with exterior views. A substantial group of large-format interior photographs from both Waldemere and Marina, Barnum's third and fourth homes in Bridgeport, includes commentary on each room written by his second wife.

6. Photographs and portraits of Barnum family members. In having pictures made, both in paint and as formal studio photographs, P.T. Barnum, his wives, children and grandchildren participated in the important social practice of portraiture. Barnum made astute use of photography to promote his human attractions throughout his career, and a number of the family photographs in the collection, particularly the large-scale images of Barnum himself in later years and the entire clan in a formal "conversation piece," demonstrate how family photography can also be highly strategic.

THE VALUE OF A THEMATIC APPROACH TO DIGITIZING

Why take a thematic approach to digitizing material-culture and visual-culture collections in the Barnum Museum and the Bridgeport History Center? I have given this question a lot of thought as I continued to work on this project. My opinions about this grow out my teaching experience with both undergraduate and graduate students and my ongoing contact with museum visitors and non-specialist audiences.

Here is my thought on the topic. Museum digitization projects are primarily useful to scholars, but the intellectual framework that guides almost all collection cataloging (maker, type, medium, gift/purchase and to a lesser extent a simple statement about association such as original ownership) does not help community audiences make sense of what they find online. What I hope that the Barnum/BHC project will do is begin to articulate and implement a strategy for helping audiences become better interpreters of historical material and visual culture collections by guiding them toward creating narratives as a product of their searches.

Although they may be accomplished users and interpreters of the objects in their own lives, people remain unfamiliar with the concepts behind material culture studies, that artifacts are primary sources that reveal ideas and information about people and the cultural and social frameworks in which they live. Scholars of material culture, and history museums themselves, have done little to advance this kind of competence in both visitors and online "websiteseers." The Barnum/BHC project has the potential to advance the experience of ordinary users by encouraging them to experiment with historical

interpretation in creative ways and to see the intersection of historical objects and associated documentary materials.

Not all museum collections are equally intelligible or valuable as windows into the past, which is why an approach that centers on the most content-rich objects makes sense when resources are limited. Take for example the collection of furniture that has at least a putative association with Charles Stratton/Tom Thumb. The miniature brass canopy bed that was presented to Charles Stratton by a Birmingham, England manufacturer while six-year-old Tom Thumb was on tour in the British Isles offers many interpretive possibilities. Some other furniture lacks clear provenance and may simply be stage furniture used in later years by Lavinia Warren, who re-married after her famous husband's death at age 45, or possibly children's furniture that grew a provenance in the years after Stratton's death. In this case, I don't regard these latter items as being worth the expense of digitizing when there are so many other items – clothing, a portrait, prints, the Fairy Wedding Album, and personal memorabilia – that have clear connection and will allow web users to reconstruct his biography with clarity. What I am calling for here is a process where detailed information from curatorial files is made part of the online record for each item. As a point of contrast, the Cooper-Hewitt Museum's enormous database (still in Beta) is an example of an approach that is directed to design students, professionals, scholars and enthusiasts; it assumes that this audience already has a sense of the significance of the items and simply needs access. (It does have a plain-spoken quality in its writing that this project might take as a model, however.) Labels that are directed to scholars and collectors of antiques similarly afflict the online collections of Colonial Williamsburg.

I have to admit that I am uncertain as to just what the online entries should look like, but I think the way to explore this is to develop a prototype grouping and associated activities for both youth and adults. Focus groups – classrooms from magnet schools or after-school programs and adult education groups – could be asked to work with the collection and the activities and discuss their experiences with project staff.

Take for example, the materials relating to the famous elephant Jumbo. The collection includes such gems as a British-made printed Jumbo handkerchief that contains a "biography" of the elephant and offers insight into British attitudes toward Barnum's purchase of the animal. Other Jumbo artifacts fill in the story of the American public's response to the elephant, the ways that Barnum displayed him, his untimely death and his second "double life" as a taxidermic specimen and skeletal mount. This collection could be used for document-based writing assignments, both imaginative (a story written from the perspective of Jumbo, for example) and journalistic, where students might imagine themselves writing an obituary for Jumbo based on the evidence presented online. They could develop the labels for an online "exhibit" or print off the online images and create a bulletin-board exhibit in their classrooms.

This leads me to several comments about the cataloging standards attached to each object. Along with clear images and basic catalog information, brief descriptive essays attached to each collection object should provide an explanation of what the object is and how and where it was used (what a "rat sheet" or a "girandole" was, for example). However, the essay should not "lead the witness" by making an argument about the artifact's importance, although rarity or uniqueness can be pointed out. This is a decision that users should be allowed to make. Subject fields and item-level description can suggest research paths for users, including related objects. Because Library of Congress subject fields can be so

problematic (the term “freak show,” for example), the staff for this project may need to consider and propose alternatives. It may be the case that these terminology choices (“little people” over “midget” is another that comes to mind) will also need to be explained to users in some way.

I strongly recommend that project staff evaluate item-level cataloging in relation to users through experimentation between end of this project and beginning of implementation of the next phase. This will allow the amount and kind of information in the cataloging can be evaluated. I also suggest that staff develop activities using these thematic groupings. Again, these can be directed to several different age groups and cohorts. I recommend that these be available through both the Barnum Museum and Bridgeport History Center websites but also that they become part of the CTDA project page. I also recommend that the project team consider some kind of comment feature where users can share data back with the museum and the BHC.

A NOTE ABOUT THE BARNUM LETTER COPYBOOK

Outside of the artifact collection, the Barnum Museum-possesses an extraordinary artifact that needs to be digitized and added to any future implementation project. This is the P. T. Barnum letter copybook, a 700+ page bound collection of manuscript copies of his 1845-46 correspondence that is unique and pertains to an extremely significant time in his career, yet remains untapped and completely inaccessible because of its fragility. Evaluating the contents of this letter copybook was outside the scope of my participation in the planning grant, but I am well aware that it represents a significant resource for scholars. Along with allowing us to assess Barnum’s career strategies and personal life at a time when he became a national figure, the copybook may also allow us to reconnect artifacts in the museum collection to their histories in greater detail; at this point we just don’t know. I recommend that this book be evaluated for digitization and that this be added to any implementation proposal to the National Endowment for the Humanities or another funding agency.

Thinking more speculatively, the copybook may present an important opportunity to experiment with online public access of historical documents. I recommend that the project staff not worry about transcribing the book before it is posted online but consider creating a crowdsourcing project through a local university and CTDA.

CONCLUSION

The Barnum Museum and the Bridgeport History Center both house collections that well deserve to be made more publically accessible. They contain primary source material in many forms that can be attractive to educators, from K-12 through college students, Barnum enthusiasts, scholars from several disciplines and others. With the creation of an interface that encourages non-specialist site visitors to undertake their own historical storytelling, the project may also provide a path forward that other historical organizations with deep thematic collections and limited resources can pursue in setting priorities and methodologies for digitization. The planning for this digitization project has moved a fruitful collaboration forward for two organizations that are rich in collections but have limited resources to make them accessible to the public. Collaborating with the Connecticut Digital Archive, and being willing to experiment with methods of public engagement with digital resources, may make the Barnum/BHC digitization project a national model for presenting online history collections. I appreciate the opportunity I have had to work with talented staff and to play a small role in this exciting project.

Rubric for Assessment of Artifacts in P. T. Barnum Collections
Re: Prioritizing Artifacts to be Digitized

Acc.# _____ or Group Type _____
Description _____
Location _____ Date of review _____
Framed? ☐ yes Bound? ☐ yes Points Total (27 max.)

Attributes		Content and Utility for Humanities Research	
Appearance (image capture readiness) <ul style="list-style-type: none"> Very good to excellent Good but would benefit from some conservation treatment Fair; needs extensive conservation treatment Poor, not likely to provide a useful image 	4	Historical associations <ul style="list-style-type: none"> Identified, strong (an individual, event, movement) Identified, moderately strong Probable association, but not well-documented; further research would be required Marginal, slight evidence or circumstantial only, no documentation 	4
	3		3
	2		2
	1		1
Distinctiveness <ul style="list-style-type: none"> Unique or likely to be unique Rare or uncommon Similar examples may be in other public collections Similar examples are fairly plentiful Unremarkable, or widely available 	5	Likely to be of interest to (acknowledge all that apply) <ul style="list-style-type: none"> Broad appeal, all ages and interest levels Educators and students, grade school to high school Scholarly research or advanced academic study Authors, publishers, filmmakers, documentary producers Other museums; archives, libraries _____ 	1
	4		1
	3		1
	2		1
	1		1
Provenance <ul style="list-style-type: none"> Strong, origin/history of ownership is documented, OR provenance is not a key criteria for this item Good, origin/history of ownership reasonably certain but not well-documented Fair, origin/history of ownership is circumstantial or poorly documented; needs much more research None known 	4	Cross-disciplinary potential <ul style="list-style-type: none"> High Good Moderate Limited 	4
	3		3
	2		2
	1		1
Notes	Total:	Notes	Total:

File Naming Scheme for Digital Image Files and Corresponding Metadata Files

Prepared by Barnum Museum staff

Object Identifier Numbers

The primary identifier that we need to link an image to an artifact or document is the accession number. Therefore it is critical that the file naming scheme include the accession number (or the number that functions as a unique identifier). There are four other types of identifying numbers in use besides the conventional tri-part accession numbering system. The conventional tri-part system consists of a four-digit year followed by the gift/acquisition number in that year, followed by the item number in that gift/acquisition (e.g., 2009.003.125). The other formats include “T numbers,” “EL numbers,” and “BF numbers,” as well as “original collections” object numbers, which begin with the abbreviation “No.” Original collections refer to the items owned by the Bridgeport Scientific Society and Fairfield County Historical Society. The only number formats we are using now are the conventional tri-part accession number and “T” numbers; the latter is a variation of the normal accession number system. An explanation of these various systems is included at the end of this document.*

It is very important to note that there will be differences between the formatting of accession numbers in the file naming scheme and the way we normally format accession numbers in our electronic collections records and hard copy worksheets, accession files, etc. One difference is that the segments of the object number will be *separated by hyphens, rather than periods, in the file naming scheme*. Another difference is that we will *add two leading letters to object numbers that currently do not have them*. The reason for this is to try to standardize the number of and type of digits in the file names. Even though our conventional accession numbers do not include leading letters, we do have many items with identifiers that begin with EL or BF or T. Therefore two “leading letters” will be added to numbers that do not have them using the categories listed below. This will only be done for file naming; leading letters will not be added to the object’s other records--they are simply a tool for the image file management.

AN = (“accession number”) will be used to precede a normal accession number

BF = (already in use, stands for “Barnum Foundation”)

EL = (already in use, stands for “Extended Loan,” meaning the item is in the City of Bridgeport’s collection)

IN = (“inventory number”) will be used to precede an inventory number or original collection number (However, we will absolutely try to avoid having inventory numbers as the identifiers, as they can be quite problematic.)

TN = (“temporary number”) will be substituted for “T” with our T-number objects.

The Museum’s original collection’s inventory numbers are typically three or four digits. To be consistent with the number of digits used in the other file names, leading zeroes will be used (if needed) to ensure

we have four digits in the first section of the object identifier number. A second and third section, consisting of three zeroes in each section, will be added to the inventory number. (No second or third sections were used with the original collections or other inventory numbers; these additions are solely for the purpose of keeping the file names the same length.) Example: IN-0238-000-000 for an object identified as No. 238.

View Identification

In our file naming scheme, we also want to identify the view, so that for any object or document with more than one image, we can easily identify a front view, back view, ¾ view, etc. Outside of the file name, we will need to establish the definitions for what a “first view,” “second view,” and so on, should look like and provide that information to the photographer so that files are consistently named to match the view definitions. The idea is to create an efficient way to retrieve a particular view of an object, without having to open all the image files. We will probably need to define the first view, second view, etc. a little differently for each of the major types of items we are digitizing (in other words, define what a first view is for an item of furniture v. a first view for an item of clothing).

In regard to books or bound documents, we were advised by Michael Bennett (image capture specialist from UConn) not to use page numbers in a file name, rather, to reference the sequence of image capture. Therefore the view number plan will also work for this type of material as well. (Note that in our first round of digitization, we would likely only be photographing books as artifacts, not photographing/scanning pages.)

It was recommended that we use several leading zeroes with the view number in order to allow for the possibility of 1000 and up to 9999 views that might be needed for bound material. Even though we won’t be doing dozens or hundreds of views of artifacts now, it is advisable to have those seemingly “extra” zeroes as placeholders rather than run into problems later on, not having enough digits. So the view section of the file name will include a lower case “v” followed by however many leading zeroes are needed to total four digits. Examples: _v0012_ or _v0003_

Year of Image Capture

We also wish to identify the year in which the image capture took place. One of the primary reasons for this is to enable us to monitor object/artwork condition over time. For example, if deterioration or distortion or other changes are being observed in an object, comparing an image of it taken at an earlier time could be very useful. Therefore, readily being able to tell what year an image was taken (by including the year in the file name) has value to us. Although we noted that the State Library uses the date, exact time, and work station of image capture as the primary identifier in their file naming scheme, we felt that high level of detail would not be a useful scheme for our institution. We do, however, see the value of including the year in which the image capture took place for the reason noted above as well as others.

Character Use in File Naming

As mentioned previously, hyphens will be used to separate the segments of the Object Identifier Number. Underscores will be used to readily distinguish the object identifier number from the view number and the image capture year. Example: AN-1999-003-012_v0001_2014

Examples

Below are several examples of file naming using the scheme detailed above.

Object with a conventional accession number, first view, photographed in 2014:

AN-2012-012-003_v0001_2014

Objects with EL or BF designations in their accession number, eleventh view, photographed in 2015:

EL-1988-325-001_v0011_2015

BF-1989-096-010_v0011_2015

Objects with a T designation in the accession number, eighth view, photographed in 2014:

TN-2013-005-001_v0008_2014

Object with an original collections inventory/accession number, fifth view, photographed in 2014:

IN-0368-000-000_v0005_2014

***Explanation/description of the various numbering systems used in our collections (oy!!):**

“T numbers” are assigned to items for which neither an inventory number nor an accession number is found, essentially “found in collection” items. The “T” was initially used to designate a temporary number, supposing that the true number would eventually be found, however, the reality is that many objects will have a permanent “T number” because we will never positively identify the accession number. Sometimes we do get lucky and find an object’s “true identity.” In such instances, I wonder how easy (or not) it will be to change the number in the file name uploaded to the CTDA.

“EL numbers” were assigned to a large portion of the collection in the late 1980s, when it was determined that the City would continue to own all collections items given prior to 1989 and that subsequent donations and acquisitions would belong to The Barnum Museum Foundation and would be designated BF. The pre-1989 material was considered to be on “extended loan” to the Barnum Museum Foundation, hence the EL. That division between 1988 and 1989 is not absolute, as there are City-owned items with EL 1989 numbers, and items given in 1988 that belong to the Foundation. All the EL numbers are followed with either 1988 or 1989—those years do not reflect the actual year in which the item was given. When both a “proper” accession number (e.g., 1976.002.045) and an EL number exist for the same object, the proper number supersedes the EL number.

Inventory numbers were given in the 1980s. Theoretically inventoried items were assigned EL accession numbers, but it is not always possible to determine what that number is if it is not on or with the object,

as descriptions on catalog worksheets are often too vague to make a definite connection. In addition to that--and something that is extremely problematic for us--single inventory numbers were often given to groups of items (or even several items that don't necessarily even appear to relate, though perhaps there is a relationship we don't know of). So, we have many situations where there are several items with the same inventory number. We need to avoid using these 1980s inventory numbers in our file naming. They will ultimately confuse everyone.

Numbers that appear similar to inventory numbers but are written as No. 822, rather than #822 or Inv.#822, are numbers assigned by the Bridgeport Scientific Society or Fairfield County Historical Society in the late 19th and early 20th centuries. Those are essentially their accession numbers and are linked to the hand-written catalog/register that was compiled in the 1930s. They are "useful" numbers because they do connect to records, although they do not correspond to accession files at this point. If we can determine the year that the item was given we assign an accession number with that year.

Digitization (Scanning) Notes and Costs

Prepared by Elizabeth Van Tuyl, Bridgeport History Center Staff

Notes from Visit to NEDCC

The main factor driving digitization costs is the time it takes to handle and photograph the item. The lowest, base price for digitization is \$3.50/page. The size of the item can play a role because it could hinder quick and easy handling. For example, Tom Rieger said that a typical early 19th Century newspaper on good paper with easily turned pages would cost \$4.50/page because it's a little large and must be handled with a little more care, but really isn't delicate or crumbling. But many simple items in decent condition such as a post card or trade card would be \$3.50/side or item. It was not possible to get a precise schedule of digitization costs due to the variables involved in the photograph process for the types of materials we would be sending. But it would be possible to email Tom Rieger with a snap shot and description of an item along with measurements to get an estimate. The Excel chart describes what types of actions the photographer would take for individual items and what might be involved in digitizing it.

I brought an assortment of typical carte de visite, 6 1/2" x 4", and stereo photographs on cards that look "dirty" or as if they have stains. The photograph conservator said that the stains are almost all foxing. She said that there is no real way to "clean these up" in order to improve their appearance. If she applied treatment, it would be for stabilization of the item. She seemed fairly negative about the life-span of the items in question. For instance, the larger portrait of PTB that is very similar to the smaller card versions, has become quite dark. The dark appearance is mostly due to the changing albumen in the photograph and there really isn't a way to reverse the degradation according to Mr. Rieger. For a group of four cards in various sizes, the photograph conservator said that it would cost about \$500.00 to "clean" and stabilize them.

Both the photographer and the paper conservator examined the Bethel Ledger. The main concern they had was for the binding and cover, not the contents. The ledger actually lies mostly flat and the pages are not difficult to access. There are quite a few blank pages. Paper conservators work on paper, so the book and binding experts will do an assessment on the ledger for any repairs. As stated above, Mr. Rieger will provide an estimate for digitizing the ledger, so it will be interesting to see how pre-treatment costs compare to photographing it post-treatment.

Digitization Cost Estimates from the NEDCC Photography Director:

The main factor driving digitization costs is the time it takes to handle and photograph the item. The lighting and arrangement of the item to be photographed can factor into the digitization process as well as the occasional need to photograph particular items in sections at a particular resolution creating a single image with editing software. The lowest, base price for digitization is \$3.50/page. The size of the item can play a role because it may hinder quick and easy handling. For example, Photography Director Tom Rieger said that a typical early 19th Century newspaper on good paper with easily-turned pages would cost \$4.50/page because it's a little large and must be handled with a little more care, but really isn't delicate or crumbling. But many simple items in decent condition such as a post card or trade card would be \$3.50/side or item. In applying estimated costs for digitizing specific items, the BHC consulted with the NEDCC Photographer extensively for information on determining costs by item type and condition. In

several cases, we received digitization estimates for specific items, such as ledgers, albums, and photographs, as well as for several items that were left at NEDCC for conservation treatment proposals.

The chart below lists digitization costs for different item types relative to condition:

Item Type	Cost
Courier/Programme, “delicate/compromised”	\$6.50/page
Courier/Programme, “good”	\$3.50/page
Courier/Programme, damaged/most delicate”	\$8.50/page
Handbill, Rat Sheet, single sheet, including 2-sided - <u>Encapsulated</u>	\$5.00/side
Lithograph	\$6.50
Page, damaged [applies to very delicate but still digitizable pages in booklets]	\$7.00/page [e.g. Great Clown Songster]
Page, delicate	\$4.50
Page, simple / easy handling	\$3.50 [base price]
Photographs: cdv's, stereoviews, cabinet cards, etc., small to medium size	\$6.00
Sheet Music, delicate	\$6.50/page